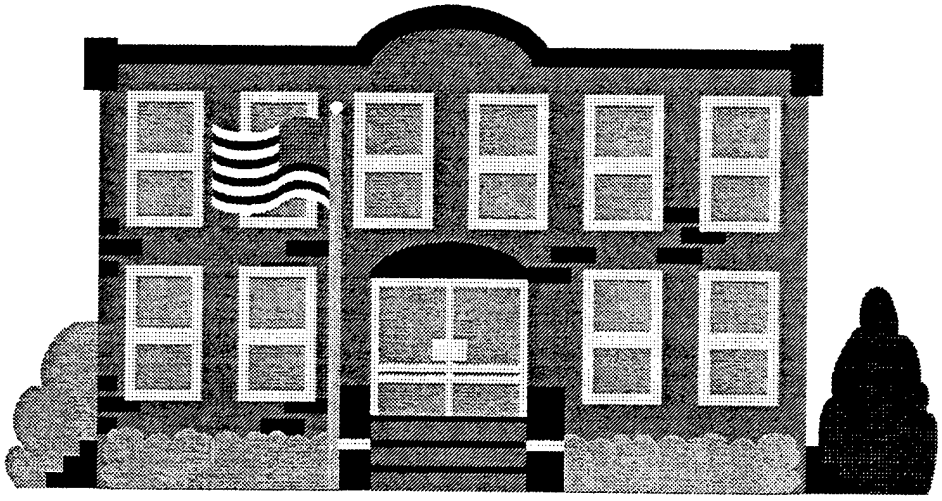
Department of Defense

Military Manpower Training Report FY 1999



August 1998

Department of Defense

Military Manpower Training Report FY 1999

Prepared by Defense Manpower Data Center
for:

Office of the Under Secretary of Defense
(Personnel & Readiness)
Department of the Army
Department of the Navy
Department of the Air Force

August 1998

FY 1999 MILITARY MANPOWER TRAINING REPORT

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EXECUTIVE SUMMARY

The Military Manpower Training Report (MMTR) describes individual institutional military training requirements based upon the President's Budget. The FY 1999 MMTR specifically compiles Department of Defense military student training data by Service component, active and reserve, for each category of individual institutional training for Fiscal Years 1998 and 1999. Data elements for this report are compiled and submitted by the Services. Many calculations in this report are affected by rounding. The Department's required training loads are listed below:

TABLE 1. Component Student Load

	FY98	FY99
Active Components		
Army	49,667	52,789
Navy	39,530	36,785
Marine Corps	21,421	21,970
Air Force	28,073	28,080
Subtotal	138,691	139,624
Reserve Components		
Army Reserve	7,439	8,024
Army National Guard	9,263	10,143
Naval Reserve	632	626
Marine Corps Reserve	3,155	3,356
Air Force Reserve	3,261	3,253
Air National Guard	3,424	3,466
Subtotal	27,174	28,868
Total	**165,865**	**168,492**

Component student loads are derived from the President's Budget for FY 1999 and are consistent with the Department of Defense request for authorization of military manpower strengths, active and reserve.

Definitions and Explanation of Training Load

This report discusses individual training and education within the Department of Defense provided by active Military Service training and education institutions. Individual training and education, for purposes of this report, is divided into six categories:

- Recruit Training, given to enlisted entrants who have not had previous military service.
- One-Station Unit Training (OSUT), an Army program that combines Recruit Training and initial Specialized Skill Training into a single course.
- Officer Acquisition Training, which leads to a commission in one of the Services.
- Specialized Skill Training, which prepares military personnel for specific jobs in the Military Services.
- Flight Training, which prepares prospective pilots and navigators for an initial operational assignment.
- Professional Development Education, relating to the advanced professional duties of military personnel or to advanced academic disciplines to meet Service requirements.

"Training load" is the number of student-years that a Service Component received (will receive) in formal institutional training and education courses during a fiscal year.

Training loads are derived from the need to replace losses in each skill required in the military force structure. Losses, through separations, promotions and other causes, are projected at various points in the future and compared to the projected inventory of trained personnel. The difference between the requirement in each skill and the inventory becomes the demand for newly trained personnel. A phased input of students to the training establishments is then scheduled so that trained personnel, in each skill area and skill level, are available at the proper time to replace the losses. This is the basis of the training load addressed in this report.

The training load of each component is the measure of the amount of training planned for members of that component, although some of the training will be done by other Services, in DoD schools or, in some cases, by institutions outside the Department of Defense. The training of members of the Reserve Components included in the report is the formal school training provided by the active training establishment to individual members of the Reserve Components while they are on active duty for training. This is primarily training provided to non-prior service personnel entering the Reserve Components.

An Overview of Training Load

For FY 1999 the total required DoD training load is 165,865. About 84 percent of this training load is for members of the active forces. The remaining 16 percent is training for members of the Reserve Components on active duty at training establishments operated by the Active Components. Whenever possible, Reserve Component personnel attend the same classes and are provided the same instruction as Active Force personnel.

Table 2 displays the distribution of total Active Force and Reserve Component load attributable to each of the major categories of training in FY 1998 and FY 1999.

TABLE 2. Distribution of Training Load

	FY98	FY99
Training Category		
Recruit Training	35,782	37,436
One-Station Unit Training (Army)	9,306	10,026
Officer Acquisition Training	18,171	18,027
Specialized Skill Training	86,861	86,458
Flight Training	4,764	5,142
Professional Development Education	10,981	11,403
Total	**165,865**	**168,492**

In terms of training load, the largest categories of training load are Specialized Skill Training and Recruit Training, both of which, along with the Army One-Station Unit Training, are strongly influenced by the number of enlisted non-prior service accessions. Specialized Skill Training is the largest training category for FY 1999 with 52 percent of the Active Force and 49 percent of the Reserve Component load.

Table 3 divides the required training load for FY 1998 and FY 1999 into two parts: (1) accession-related training which provides civilian entrants with the initial skills needed to perform the duties of their first military occupations; and (2) other training that is conducted to prepare members for more specialized duties in later stages of their military careers.

For FY 1999, training related to new accessions amounts to about 69 percent of all training programmed for the Active Forces. For the Reserve Components, the percentage is 87. The load dedicated to accession-related requirements highlights the priority the military services place on training new military members. Detailed information on each category of training is provided in Chapters III through VII of this report.

TABLE 3. Accession-Related Training
(Thousands of Loads)

	FY98		FY99	
	Active	Reserve	Active	Reserve
Accession Related Load				
Recruit	28.2	7.5	28.5	9.0
One-Station Unit Training	6.7	2.6	7.2	2.8
Officer Acquisition	16.3	1.8	16.2	1.8
Initial Skill (Off & Enl)	40.6	11.0	40.3	11.0
Undergraduate Flight	3.7	0.4	4.0	0.4
Subtotal	**95.6**	**23.4**	**96.1**	**25.1**
Other Training Load				
Other Specialized Skill	32.1	3.1	32.1	3.1
Other Flight	0.6	0.1	0.6	0.1
Professional Development	10.4	0.6	10.8	0.6
Subtotal	**43.1**	**3.8**	**43.5**	**3.8**
Total Load	**138.7**	**27.2**	**139.6**	**28.9**
Accession Related Load as a Percent of Total Load	**69%**	**86%**	**69%**	**87%**

Manpower In Support of Individual Training

Individual training requires manpower to conduct and support instruction, manage military schools and training centers, maintain training bases, and provide support to students, military staff members and their dependents. Chapter VIII of this report provides information about the military and civilian manpower needed for individual training. Manpower in support of individual training for FY 1998 and FY 1999 is shown by Service in the following table.

NOTE: All individual training categories are included. The manpower includes instructors, instructional support, school/training center administration, student supervision and direct training support.

TABLE 4. DoD Manpower in Support of Individual Training
(End Strength, Thousands)

	FY98			FY99		
	MIL	CIV	Total	MIL	CIV	Total
Army	30	17	46	29	16	45
Navy	19	7	26	20	6	26
Marine Corps	12	2	14	12	1	13
Air Force	17	10	27	17	9	26
Total	**79**	**35**	**114**	**78**	**33**	**111**

TABLE 5. DoD Manpower in Support of Individual Training by Function
(End Strength, Thousands)

	FY98			FY99		
	MIL	CIV	Total	MIL	CIV	Total
Conduct of Individual Training	58	13	71	58	13	71
Operating Support	19	21	41	19	20	39
Training Headquarters	1	1	2	1	1	2
Total	**79**	**35**	**114**	**78**	**33**	**111**

Trends in Individual Training

This section provides information on the individual training load, workload, manpower and funding. Two years of actual (executed) data are provided to compare with current and budget year estimates. Please note that for various reasons unrelated to the requirements for training, Services typically are not able to execute 100% of their estimated training loads. Table 6 shows the FY 1995 to FY 1999 trend in training loads for each Active and Reserve Component.

TABLE 6. Active and Reserve Training Load Trends by Service
(Thousands of Loads)

	Actual			Estimates	
	FY95	FY96	FY97	FY98	FY99
Active Components					
Army	45.0	43.4	45.1	49.7	52.8
Navy	39.5	38.1	39.5	39.5	36.8
Marine Corps	16.1	20.3	21.2	21.4	22.0
Air Force	24.4	24.1	25.9	28.1	28.1
Subtotal	124.9	125.9	131.7	138.7	139.6
Reserve Components					
Army National Guard	7.4	7.1	8.1	9.3	10.1
Army Reserve	6.2	5.9	6.1	7.4	8.0
Naval Reserve	.7	.7	.4	.6	.6
Marine Corps Reserve	2.1	2.7	2.9	3.2	3.4
Air National Guard	2.2	2.2	2.9	3.4	3.5
Air Reserve	2.8	2.5	2.9	3.3	3.3
Subtotal	21.5	20.9	23.2	27.2	28.9
Total	**146.4**	**146.9**	**154.8**	**165.9**	**168.5**

Training workload accounts for all students trained by the Service Training Commands. This includes DoD military students, civilians, foreign students and students from other U.S. government agencies. Table 7 shows actual and estimated training workload trends for each Service, FY 1995 through FY 1999.

TABLE 7. Training Workload Trends
(Thousands of Loads)

	Actual			Estimates	
	FY95	FY96	FY97	FY98	FY99
Army	62	61	63	71	76
Navy	42	41	42	43	40
Marine Corps	15	18	18	18	18
Air Force	30	31	32	36	36
Total	150	151	155	168	169

The following table demonstrate the Department's emphasis on improving training efficiencies. Although total training workload requirements are estimated to increase by 13 percent from FY 1995 to FY 1999, there has been a 13 percent reduction in training manpower.

TABLE 8. Manpower Trends in Support of Training
(Combined Military and Civilian End Strengths, Thousands)

	Actual			Estimates	
	FY95	FY96	FY97	FY98	FY99
Army	54	49	47	46	45
Navy	31	34	29	26	26
Marine Corps	13	12	13	14	13
Air Force	29	31	27	27	26
Total	127	125	117	114	111

The Necessity for Individual Training

The primary objective of individual training is to provide the operational forces with personnel who are adequately trained to assume jobs in both Active and Reserve military units. One of the cornerstones of readiness is the conduct of effective individual training at Service Training Institutions. Unlike in past wars, we may not be able to count on extended periods of mobilization and training in response to future conflicts. Maintaining excellence in our individual training at Service Training Institutions during peacetime results in a military force ready to respond in a national emergency.

I

INTRODUCTION

Training Requirements and Manpower Requirements

Requirements for training and education of military personnel are derived ultimately from national security objectives. The Military Manpower Training Report (MMTR), the Report of the Secretary of Defense to the Congress on the FY 1999 Budget, and the Defense Manpower Requirements Report, describe the progression from national security objectives to training load requirements. The Report of the Secretary of Defense explains the relationship between the threat and the forces designed to cope with the threat. The Defense Manpower Requirements Report describes the requirement for trained manpower to man the forces. Using this trained manpower requirement as its starting point, the Military Manpower Training Report details the amount of training needed, describing the "training demand" in terms of student loads. The Defense Manpower Requirements Report and the Military Manpower Training Report are mutually supportive; however, the data in the two reports are not interchangeable or directly comparable. The principal reason for this difference is that the main focus of the Defense Manpower Requirements Report is upon requested strength on the last day of fiscal years (that is, end strength), whereas the main focus of the Military Manpower Training Report is upon required student loads (a concept more comparable to average strength, or man-years, than to end strength).

Definition of "Individual Training and Education"

This report addresses the "individual training and education" activities of the Department of Defense; that is, the training of individual military members in formal courses conducted by organizations whose primary mission is training. This training is different from training activities conducted by operational units incidental to their primary combat, combat support, or combat service support missions. Training conducted within operational units (including the training of crews and teams) is not included in the training loads discussed in this report. In certain categories of training, on-the-job training (OJT) in units substitutes to some extent for all or part of formal course training requirements. OJT is also not included in the training loads discussed in this report.

The purpose of individual training is to give individual service members the skills and knowledge that will qualify them to perform effectively as members of operational military organizations. "Individual training" includes formal military and technical training and professional education conducted under centralized control, generally under the supervision of a Service Training Command or similar organization. The trainees and students undergoing the training and education addressed in the MMTR include Active Force members and Reserve Component members:

- Active Force trainees and students include officers, enlisted personnel, warrant officers, noncommissioned officers, and Service academy cadets and midshipmen.

- Reserve Component trainees and students include officers, warrant officers, noncommissioned officers, and enlisted members on active duty for training in formal school courses.

Some civilian students attend training in programs such as the Reserve Officers' Training Corps (ROTC) prior to their entry into a Service. These programs are also discussed in the report. However, training loads only account for training and education of personnel while they are in active military status.

In general, the training discussed in this report is conducted under Major Defense Program 8, "Training, Medical and Other General Personnel Activities," as presented in the Defense budget. Exceptions to these general rules are pointed out, where appropriate, in the body of the report.

Personnel undergoing individual training and education are classified for manpower accounting purposes as trainees, students, or cadets. The exceptions are: (1) personnel undergoing training while on temporary duty or temporary additional duty away from their unit of assignment, or (2) personnel being trained while en route to new stations as transients. The term "trainees" is generally used for all enlisted personnel in Recruit Training and Initial Skill Training. "Cadets" (or "midshipmen" in the case of the Naval Academy) are members being educated at one of the Service academies. All others receiving individual training and education are identified as "students." The distinction is not important for the purposes of this report, and the term "student" will be used where appropriate to describe members of all three classifications as well as temporary duty and transient personnel being trained.

FY 1999 Military Manpower Training Report and the FY 1999 Budget

It is important to emphasize that this MMTR, while consistent with the Department of Defense Budget for FY 1999, differs in structure from the budget justification. Budget justifications are focused on explaining how, by who, and why money is to be spent. Budgets for training and their justifications, therefore, are prepared by the Service conducting the training programs. As a result, each Service must justify and obtain funds to train personnel from other Services in addition to its own personnel.

By contrast, the MMTR details and justifies the requirement for student training loads of the components of the parent Service whose members are undergoing the training. For example, Navy personnel being trained by the Air Force are treated in the MMTR as part of the Navy military student training load since they are being trained to fill Navy requirements. However, in O&M budget justification documents, Navy students attending Air Force schools are included in the Air Force training workload tables that justify Air Force training resources. This report also contains summary tables of the manpower required by the Services to conduct training based on estimated workloads.

Definitions of Major Training Categories

The portion of this report that discusses training loads in detail is organized into five chapters (Chapters III through VII), each of which addresses one of the major categories of training. These major categories are briefly defined below. Each chapter will more fully describe the training category and its sub-categories, the required training loads, and the training methodology.

Recruit Training includes the introductory physical conditioning, basic military training, indoctrination and the acquisition of common skills given to all new enlisted entrants in each of the Services.

One-Station Unit Training (OSUT) is an Army training program that meets the training objectives of both Recruit and Specialized Skill Training in certain skills through a single course conducted by a single training unit. Because it includes elements of two categories of training, it is treated separately in this report.

Officer Acquisition Training, sometimes called pre-commissioning training, includes all types of education and training leading to a commission in one of the Services. Examples are programs of the Service academies and Officer Candidate/Training Schools. Students not in active military status, such as Reserve Officers' Training Corps cadets, are excluded from required loads in this report.

Specialized Skill Training provides officers, warrant officers, noncommissioned officers, and enlisted personnel with initial job qualification skills or new or higher levels of skill in their current military specialty or functional area. This category includes Army Advanced Individual Training and Navy Apprenticeship Training. Certain flight-related training, such as training of air traffic controllers, aircraft mechanics, and Air Force survival training, is reported under Specialized Skill Training. The Marine Corps Combat Training (MCCT) phase of the Marine Battle Skills Training has been included in this category since FY 1989.

Flight Training provides the individual flying skills needed by pilots, navigators, and naval flight officers. The undergraduate flight training programs culminate in an officer receiving "wings" and being categorized as a "designated" or "rated" officer. The undergraduate programs do not include formal advanced flight training programs.

Training conducted by Service advanced flight training organizations is beyond the scope of this report.

Professional Development Education includes educational courses conducted at the higher-level Service Schools or at civilian institutions to broaden the outlook and knowledge of military personnel or to impart knowledge in advanced academic disciplines to meet Service requirements. Training of this type is required to prepare individuals for progressively more demanding assignments, particularly for higher command and staff positions. Programs include undergraduate and graduate education as well as courses not leading to a degree.

Education and training for senior non-commissioned officers, which has a broad professional content, is included in Professional Development Education rather than in Specialized Skill Training. Professional Military Education (PME) conducted by the Air Force for more junior enlisted personnel is also included in the Professional Development category. However, training of junior and middle-grade officers and non-commissioned officers usually includes specific branch or job-specific training rather than broad, common skills. Designation of this training varies by Service: for example, Navy Leadership Training, which is given to all grades of petty officers, is included in Specialized Skill Training.

Determining Training Requirements and Training Load

The amount and type of training to be conducted in the Department of Defense is the product of a series of calculations that is described in Appendix A to this report.

In brief, the process begins with the determination of the requirement for military personnel with specific skills to fill positions in the approved or projected force. The requirement for trained manpower must then be measured against the available inventory of trained personnel projected at various points in the future.

This comparison, made for each military skill and skill level, establishes the need for training personnel to fill current and projected skill shortages. The requirement for the training of personnel to maintain the skill inventory becomes part of the workload of the Service training establishments. Training load is measured by Component in terms of the cumulative military student-years, or "training load." The training load for a given period is a measure of the amount of training to be accomplished. It is also a basis for establishing the requirement for resources (manpower, funds, materiel, and facilities) needed to support the training to be conducted by a Service.

Conceptually, the training load for a given period is the cumulative student strength for the period, roughly equal to man-years. The total training load is the sum of the loads for all the individual courses. Training loads for individual courses are determined by the following factors:

1. The length of the training course

2. The desired number of graduates, or output, of the course.

3. The number of entrants, or inputs, into the course required to obtain the desired output. This, in turn, depends on the pattern of attrition, or failures of entrants to graduate, for the course.

The training load is computed by the following formula:

$$\frac{\text{Entrants} + \text{Graduates}}{2} \times \text{Course Length}^{1/} = \text{Load}$$

[1/] Training time is expressed as a fraction of a year

This is the basic method for computing the training loads discussed in this report. However, if attrition does not occur at a uniform rate (as is frequently the case) and the rate and phasing of that attrition can be specified, more complex formulas and computer routines are used to estimate training loads.

Accuracy in Projecting Training Loads

Training load authorizations are requested well in advance of the period when the training is actually conducted. While loads for some long lead-time programs, such as the Service Academies, can be predicted with considerable accuracy, there are many uncertainties in projecting training loads. Some of the causes of uncertainty are:

1. Unanticipated changes in end strength levels and force structure, requiring adjustment of the skill inventory and the mix of courses in the training load.

2. Unpredictability of individual decisions to enlist, re-enlist, or retire. These factors may lead to unanticipated changes in the skill inventory, requiring changes in the composition or size of training loads, or to shifts of portions of the training load from one fiscal period to the following period.

3. Changes in attrition rates and patterns, causing unprogrammed fluctuations in training rates and loads.

By forecasting training needs as far as possible into the future and continuously reviewing and adjusting training inputs and loads, the Services adapt the training system to changing conditions. The MMTR represents a "snapshot" of the Services' training objectives early in their budget cycles. Extended projections based on that snapshot are subject to change. Adjustments are inevitable -- in fact, necessary -- for good management.

Training Load Request by Component and Category

The following two tables display by category the required training loads for FY 1998 and FY 1999. The loads for each period are shown by component and by each of the major categories of training.

TABLE I-1. Military Training Student Loads, Fiscal Year 1998
by Component and Major Training Category

	Recruit	One-Station Unit Training	Officer Acquisition Training	Specialized Skill Training	Flight Training	Prof. Dev. Education	Total
Active Forces							
Army	7,925	6,707	4,883	26,847	732	2,573	49,667
Navy	9,106	0	5,577	21,737	1,397	1,713	39,530
Marine Corps	7,686	0	607	10,971	524	1,633	21,421
Air Force	3,530	0	5,268	13,179	1,659	4,437	28,073
Subtotal	28,247	6,707	16,335	72,734	4,312	10,356	138,691
Reserve Components							
Army National Guard	2,602	2,047	62	4,311	176	65	9,263
Army Reserve	2,653	552	120	4,046	9	59	7,439
Naval Reserve	226	0	0	385	0	21	632
Marine Corps Reserve	1,392	0	164	1,544	0	55	3,155
Air Force Reserve	278	0	1,485	1,190	66	242	3,261
Air National Guard	384	0	5	2,651	201	183	3,424
Subtotal	7,535	2,599	1,836	14,127	452	625	27,174
Total	**35,782**	**9,306**	**18,171**	**86,861**	**4,764**	**10,981**	**165,865**

TABLE I-2. Military Training Student Loads, Fiscal Year 1999
by Component and Major Training Category

	Recruit	One-Station Unit Training	Officer Acquisition Training	Specialized Skill Training	Flight Training	Prof. Dev. Education	Total
Active Forces							
Army	9,098	7,242	4,827	28,073	794	2,755	52,789
Navy	7,853	0	5,501	20,036	1,488	1,907	36,785
Marine Corps	7,918	0	601	11,215	524	1,712	21,970
Air Force	3,612	0	5,261	13,020	1,784	4,403	28,080
Subtotal	28,481	7,242	16,190	72,344	4,590	10,777	139,624
Reserve Components							
Army National Guard	3,569	2,189	69	4,064	182	70	10,143
Army Reserve	3,089	595	132	4,139	12	57	8,024
Naval Reserve	240	0	0	368	0	18	626
Marine Corps Reserve	1,427	0	146	1,726	0	57	3,356
Air Force Reserve	286	0	1,485	1,165	75	242	3,253
Air National Guard	344	0	5	2,652	283	182	3,466
Subtotal	8,955	2,784	1,837	14,114	552	626	28,868
Total	**37,436**	**10,026**	**18,027**	**86,458**	**5,142**	**11,403**	**168,492**

II

TRAINING PATTERNS

General Description

The development of Service members through formal training, education, and practical experience generally follows a common pattern. New Service members (or, in the case of some Officer Acquisition Training, prospective Service members) first receive training designed to develop the basic attributes of the members of their Service. In most cases, a graduate of the initial training is then taught the skills required for a military job at the lowest skill level. Service members who do not remain beyond their initial enlistments or obligated terms of service do not, in most cases, receive additional formal training. Those who remain, the career members, will further develop their military knowledge and technical skills through experience in military jobs augmented with training or education needed to prepare them for more responsible positions. During their terms of service, military personnel are also encouraged, as their military assignments may permit, to improve themselves through off-duty and voluntary education programs. This combination of job experience, training and education is essential to the development of a military force that is capable of carrying out the national security mission.

Enlisted personnel usually work in relatively specialized skill fields, whereas the duties of officers, particularly those in the career force, call for broader expertise. For these reasons, the training and education patterns of officers and enlisted personnel differ and will be discussed separately in the following sections of this chapter.

In addition to training members of the active forces, the Service training establishments also train members of the Reserve Components. Reserve Component training, as part of individual training and education, involves Reservists and Guardsmen who are on active duty for formal school training. It does not include training of Reserve Component members provided under the following circumstances:

- Training received by individuals while on extended active duty serving with an active component (this training is included in active force aggregates);
- On-the-job training (OJT) or other individual training conducted by Reserve units;
- Training received while on annual active duty for training, except if provided through courses conducted by the active training establishment;

- Training received while the individual is not in an active military status. (As a minor exception, some Reserve and Guard technicians attend military schools in Civil Service status.)

Training of members of the Reserve Components will comprise 16 percent of all individual training and education in FY 1998 and 17 percent in FY 1999.

Officer Training Patterns

Each Service has developed career patterns to prepare its officers to assume progressively higher command and staff responsibilities. These career patterns are composed of operational assignments during which the officers learn their profession through experience and periodic individual training and education. This provides them with the knowledge and skills needed for progressively more demanding follow-on assignments.

Officer training and education can be divided into three types. First, each Service maintains a progressive system of professional military education. This education is related more to the increasing responsibilities associated with career progression and promotion than to the individual's current assignment or specialty. The primary topics are the study of officership and the command and staff knowledge required of all professional military officers. The second type of education and training includes the many skill-producing courses that enable the officer to perform immediately upon assignment to a specialized or functional area. These courses vary in length from a few days to several months. They present, for the most part, strictly job-oriented training and are often orientation or refresher courses. Third, the Services provide selected officers with advanced academic education, either in-house or at civilian institutions, to meet specific requirements for officers educated in technical, scientific, engineering, and managerial fields. Officers also participate in a variety of other educational programs, many on a part-time basis, usually with the student sharing in the cost.

Training and education for career officers involves one or more of the types of training and education described above and follows the general patterns outlined in the next paragraphs. The patterns vary among the Services to some extent, and not all officers will participate in all of the schooling described. The number of officers participating in schooling becomes progressively smaller, and participation more selective and demanding, as officers move through their careers.

Generally, non-career officers (those who are expected to serve only an initial tour of active duty) receive training only at the entry level. In some cases, lengthy skill-oriented training (such as pilot training) results in a commensurably longer active duty obligation.

Entry Level Training. Initial officer training is Service-oriented and intended to prepare officers for duties at the lowest operational level, i.e., company, squadron, or ship. Newly commissioned Army officers will attend a basic course conducted by the particular branch of the Army, such as infantry, armor or artillery. Navy ensigns are usually assigned to school training based on their warfare specialty. All newly commissioned Marine officers attend the Basic School. A newly commissioned officer in the Air Force may go to Flight Training or training in a technical specialty.

Career Training. After some operational experience, the career officer requires further professional military education to prepare for service at the next level; for example, as a unit commander or a headquarters staff officer. In the Army this entails a return to branch school for more advanced training. Navy officers at this stage in their careers may attend a school in a specialty appropriate to their future assignments. A Marine Corps officer would normally attend the Amphibious Warfare School. An Air Force officer could be selected for the Squadron Officer School.

To satisfy Service requirements and as a further step in professional development, some officers are selected for participation in an advanced academic educational program at a civilian institution or at one of the two Service technical institutes, the Naval Postgraduate School and the Air Force Institute of Technology. Selected Army officers may attend the Advanced Military Studies program at the School of Advanced Military Studies.

Intermediate Service Schools. As officers progress (between six and sixteen years of service, depending on Service criteria) they are ready for the next level of professional military education. These schools prepare officers for command and staff responsibilities in preparation for assuming higher responsibilities. Officers are competitively selected to attend each Service's program.

Senior Service Colleges. Little technical training is provided after the intermediate years. The final level of professional military education is that of the Senior Service Schools (the war colleges) for which attendance is highly selective. The Army, Navy, and Air Force each has a war college. In addition, there is the National Defense University, consisting of the National War College, the Industrial College of the Armed Forces, and the Capstone Course for general officers. Officers graduating from the Senior Service Schools have the academic foundation required for command and staff positions at the highest level. The different curricula of these schools reflect the different missions of the Services. In some instances Reserve officers are able to attend Senior Service Schools in residence. The schools also offer a non-resident course that consists of correspondence studies and resident phases.

Enlisted Training Patterns

Recruit Training introduces new enlistees to military life. Following this indoctrination, they will follow one of three possible avenues dictated by their respective component's requirements:

1. Initial Skill Training that prepares the enlistee for an initial duty assignment;

2. Direct assignment to first duty unit based on skill already acquired in civilian life; or

3. Direct assignment to first duty unit for on-the-job training (OJT).

The Army One-Station Unit Training (OSUT) program is a variation of the first of these three avenues, since it combines Recruit and Initial Skill Training into a single course, followed by assignment to an operational unit.

The expected distribution of Active Recruit Training graduates for FY 1999 is shown in the following table.

TABLE II-1. Disposition of Active Recruit Training Graduates FY99

	Army	Navy	Marine Corps	Air Force
To Initial Skill Training	99%	65%	99.8%	100%
To Duty Assignment (Civilian-Acquired Skill)	1%	n/a	0.2%	0%
To Duty Assignment (On-The-Job-Training	0%	35%	0.0%	0%
Total	**100%**	**100%**	**100%**	**100%**

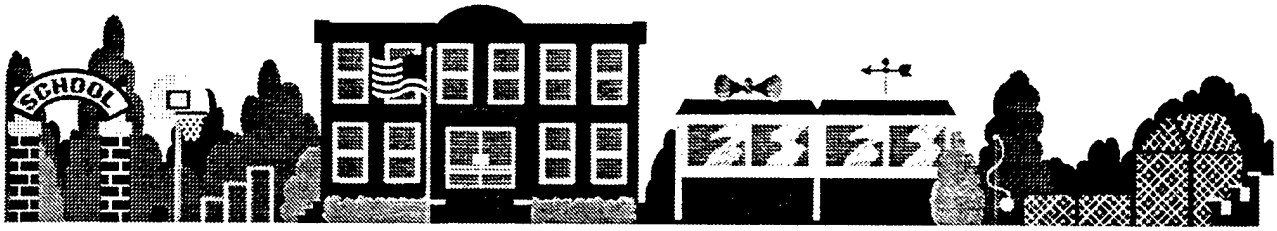
As the table indicates, most enlisted personnel receive formal Initial Skill Training to provide them with a basic military skill. This combination of Recruit Training and Initial Skill Training (or Army One-Station Unit Training) turns civilians into Service members qualified to fill positions in Active or Reserve units.

During their initial enlistment, personnel normally receive no further formal skill training but gain experience through on-the-job training in the work environment. The major exception is Navy training, conducted by fleet training centers in such shipboard duties as fire fighting.

exception is Navy training, conducted by fleet training centers in such shipboard duties as fire fighting.

After reenlistment, individuals may be selected for attendance at a journeyman-level course in their specific occupational area. This training emphasizes the appropriate military applications for the skills being taught. Most enlisted personnel are given the opportunity to attend Non-Commissioned Officer (NCO) professional development training programs that prepare them for increased supervisory and leadership responsibilities.

Enlisted personnel attend regularly programmed specialized courses when circumstances require it: for example, where new equipment or systems are introduced into a Service, and senior level enlisted personnel need to be formally trained in operation and maintenance techniques. Selected Active and Reserve senior enlisted personnel attend schools, such as the Army's Sergeants Major Academy and Air Force's Senior NCO Academy, which are on the NCO level, similar in purpose to the Intermediate and Senior Service Schools in the officer education system.



III

RECRUIT TRAINING AND ARMY ONE-STATION UNIT TRAINING

General Description

Recruit Training is the basic indoctrination training given to enlisted personnel upon their initial entry into military service. Recruit Training provides an orderly transition from civilian to military life, instruction in the required basic skills, and motivation to become dedicated and productive. Training in each of the Services emphasizes discipline, military rules, social conduct, physical conditioning and development of self-confidence. Beyond these common objectives, Recruit Training in each Service is designed to meet the particular training requirements of that Service that reflect the Service's mission. Graduates of Recruit Training have the basic knowledge and skills required to qualify them, after formal or on-the-job training in a particular skill, for service in an operational unit of the parent Service.

Army One-Station Unit Training (OSUT) is unique in that it combines Recruit Training and Initial Skill Training in certain skills into a single course conducted by a single training unit at a single training installation. OSUT therefore includes elements of two major training categories; consequently, it is treated separately at the end of this chapter. OSUT training loads are displayed separately in Tables III-5 and III-6 at the end of this chapter. *OSUT training loads are not included within Recruit Training tables in this chapter nor in Specialized Skill training loads displayed in Chapter V.*

Recruit Training Loads

The training loads for FY 1993 through FY 1999 for each component of each Military Service are shown in Table III-1 on the following page. Note that the downward trends during this period were caused by reductions in accessions. As accessions have returned to the levels required for each Service to sustain authorized end strengths and support enlisted career force planning, Recruit Training loads have increased. Total Recruit Training loads reflect only a slight change for FY 1998 and FY 1999 despite a significant increase for the Army and a significant decrease for the Navy.

TABLE III-1. Recruit Training Load Trends

Service Component	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Army							
Active	6,730	5,583	5,141	6,281	7,524	7,925	9,098
Reserve	2,523	2,094	2,136	1,831	1,924	2,653	3,089
Natl Guard	1,999	1,970	1,795	1,664	2,295	2,602	3,569
Navy							
Active	10,769	9,025	8,134	7,926	8,304	9,106	7,853
Reserve	449	415	209	324	140	226	240
Marine Corps							
Active	6,547	5,965	5,895	6,591	7,749	7,686	7,918
Reserve	1,070	1,113	1,116	1,190	1,397	1,392	1,427
Air Force							
Active	3,650	3,409	3,378	3,536	3,718	3,530	3,612
Reserve	103	88	142	75	57	278	286
Natl Guard	298	263	185	251	243	384	344
Total							
Active	27,696	23,982	22,548	24,334	27,295	28,247	28,481
Res/Gd	6,442	5,943	5,583	5,335	6,056	7,535	8,955
Total	**34,138**	**29,925**	**28,131**	**29,669**	**33,351**	**35,782**	**37,436**

NOTE: In this table and in all subsequent tables in this report, training loads for the years prior to and including FY 1997 data are actual, FY 1998 and subsequent years' data are estimates.

Table III-1 does not include Army One-Station Unit Training loads.

Recruit Training

The following table displays the average Recruit Training loads for each year from FY 1996 to FY 1999 and, for FY 1998 and FY 1999, the number of entrants (input) and number of graduates (output). Data are shown separately for each component of each Service.

TABLE III-2. Recruit Training Input, Output, and Load

Service Component	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Army								
Active	6,281	7,524	51,530	48,938	7,925	53,261	50,712	9,098
Reserve	1,831	1,924	17,763	15,403	2,653	17,574	17,186	3,089
Natl Guard	1,664	2,295	17,275	15,357	2,602	20,756	19,344	3,569
Navy								
Active	7,926	8,304	53,545	48,726	9,106	46,175	42,019	7,853
Reserve	324	140	1,327	1,208	226	1,412	1,285	240
Marine Corps								
Active	6,591	7,749	33,927	29,836	7,686	34,968	30,721	7,918
Reserve	1,190	1,397	6,133	5,415	1,392	6,300	5,541	1,427
Air Force								
Active	3,536	3,718	30,000	27,330	3,530	31,500	28,697	3,612
Reserve	75	57	2,139	1,990	278	2,500	2,273	286
Natl Guard	251	243	3,372	3,243	384	3,000	2,727	344
DoD								
Active	24,334	27,295	169,002	154,830	28,247	165,904	152,149	28,481
Res/Gd Tot	5,335	6,056	48,009	42,616	7,535	51,542	48,356	8,955
Total	**29,669**	**33,351**	**217,011**	**197,446**	**35,782**	**217,446**	**200,505**	**37,436**

Rationale for Recruit Training

The underlying philosophy of Recruit Training is that the demands of military service are fundamentally different from those of civilian life. Military service requires a high level of discipline and physical fitness, a homogeneous outlook, and an ability to live and work as part of a highly structured organization. There are few parallels in civilian society to the demands of military service. Each recruit, therefore, must be transformed into a member of the military team in order to function effectively in the military environment. The attitudes, habits, and basic skills formed in Recruit Training are the foundation of a cohesive military organization. Later training provides the skills and knowledge needed for specific jobs; Recruit Training shapes civilian entrants into dedicated members of their Military Services with the potential for further development.

The major determinants of Recruit Training loads are the total number of people entering service who must receive Recruit Training (input), the length of the training course, and projected patterns of attrition. Course length and attrition are discussed later in this chapter. The following two sections discuss inputs: (1) inputs of active duty personnel, and (2) inputs of members of the Reserve Components on active duty for initial training.

Active Duty Input

The annual recruiting objective for active duty enlistees without prior military service is a function of the following factors:

1. Current trained enlisted strengths.

2. Number of enlisted personnel currently in training.

3. Projected enlisted losses through separations or other reasons, e.g., desertion, death, acceptance of a commission, retirement, etc.

4. Projected prior-service enlistments, i.e., the return from civilian life of former Service members.

5. The projected requirement for trained enlisted personnel.

"Trained strength" is the number of personnel required to fill "structure" spaces, i.e., positions in military organizations that require specific grades and skills, and individual "pipeline" spaces, such as transients en route between assignments. The Defense Manpower Requirements Report contains a full discussion of how military manpower requirements are determined. The projected trained strength requirement is compared with the projected trained strength inventory to forecast future skill and strength imbalances. Future shortages that are not expected to be satisfied, either by prior service enlistees or Service members currently in skill training courses, determine the training output needed to man the force with trained personnel. To determine the necessary input to achieve this output, allowance must be made for the number of students entering a course of instruction who fail to complete it. The total input requirement is increased to compensate for expected attrition losses.

Training organizations attempt to manage inputs to achieve the most efficient use of training staff personnel and training facilities. However, the phasing of inputs may at times be varied in order to take advantage of the best recruiting periods for maintaining quality and quantity.

Historically, the highest accessions occur in June through September and in January, a reflection of the civilian academic calendar. Enlistments increase (1) shortly after high school graduation, (2) when peers return to school in the fall, and (3) after the results of the first term of college academic work are announced.

The Services must be able to accept most prospective enlistees when they are ready to enter service. Requiring enlistees to enter military service in phase with requirements and on an even flow-basis would result in the loss of many potential enlistees to other sources of employment. Accepting enlistees as they become available, however, requires a training structure capable of accommodating surges of enlistments.

Reserve Component Input

Persons enlisting in the National Guard and Reserve forces without active duty experience require the same Recruit Training as active duty enlistees, and for the same reasons. Recruit Training loads for the Reserve Components are based on the same factors as active force loads. Guard and Reserve trainees, while in Recruit Training, are mingled with active duty trainees in units so that their training is identical.

Reserve Component recruits form a significant part of the workload of the active Recruit Training establishment. Recruit Training for the Reserve and Guard will account for 21 percent of all DoD Recruit Training in FY 1998 and 24 percent in FY 1999. Reserve Component training accounts for 28 percent of all Army One-Station Unit Training programmed for FY 1998 and FY 1999.

Planning considerations for Reserve Component personnel are essentially similar to those for the active force. Detailed phasing of this training is complicated, however, by the additional consideration of civilian employment or school commitments for these personnel. For this reason, a pool of personnel who have enlisted but who have not yet attended initial training is normal. This backlog is kept within a reasonable size.

Course Length and Course Content

Enlisted training loads depend not only upon the numbers of entrants but also on the extent of skills required of entering enlisted personnel. Enlisted personnel attain those skills in Recruit Training and in Specialized Skill Training. Recruit Training course lengths are determined in part by how much of the required training is to be provided during the Recruit Training phase and how much is to be deferred to later training. Because of differences in their missions, the Services take somewhat different approaches in establishing the content and length of their Recruit Training courses.

Recruit Training in each of the Services covers four areas: (1) some in-processing and testing; (2) introduction into Service life; (3) instruction in military courtesy, discipline, and hygiene; and (4) fundamental military-related training involving physical fitness, military drill, and self-defense. In addition, each Service provides training in military skills that should be possessed by most members of that Service. The degree to which these Service-wide skills exist differs among the Services. This factor accounts for most of the differences in course content and, therefore, course length. The Services' recruit training syllabi are essentially the same for men and women, but women generally receive less training on combat-oriented skills. Length of the standard Recruit Training course in each Service is shown in the following table.

TABLE III-3. Recruit Training Course Length (Weeks)				
	Army	Navy	Marine Corps	Air Force
FY98	8.0	9.3	12	6
FY99	9.0	9.3	12	6
NOTE:	Chart reflects average weeks of training. Actual course time may vary by a few days depending upon service requirements and training location.			

Army and Marine Corps Recruit Training differ from the Air Force and Navy programs because all recruits are given intensive physical conditioning and instruction in basic ground combat skills, including the use of individual weapons. The Army and Marine Corps train all enlisted personnel to achieve a basic level of qualification in ground combat skills during their Recruit Training program. Beginning in FY99 Army Recruit Training will increase from 8 to 9 weeks to allow for a more intense, more rigorous soldierization and the inculcation of Army values.

The Air Force is able to accomplish Recruit Training in six weeks because the curriculum concentrates on military indoctrination subjects. Relatively little training in Service-wide occupational skills is provided, since there are few common occupational skills needed by all Air Force enlisted personnel. In addition to indoctrinating recruits to military life, the Navy course includes phases designed to prepare them for conditions in a fleet environment and common duties found on board ships.

The average length of time spent in recruit status in any of the Services may be longer than the standard course lengths discussed above. Some recruits fall behind their peers due to medical problems. Others require remedial training. A recruit may be sent to a special training unit or recycled to a following class to repeat a portion of the course.

Enlisted members of the Reserve Components without prior service receive the same basic qualification training as active service members. Each non-prior service enlistee in the Reserve Components undergoes, as a minimum, the equivalent of twelve weeks of active duty training. This is accomplished by sending the enlistee through Recruit Training and, in most cases, on to Initial Skill Training.

Many Army Guardsmen and Reservists are provided initial military training in certain occupational skills through One-Station Unit Training. Members of the Reserve Components have the option to split their Recruit Training from Specialized Skill

Components have the option to split their Recruit Training from Specialized Skill Training. This option is limited to enlisted entrants who cannot attend all their required training in one block due to educational or occupational commitments. The Reserve member attends unit drills after completing Recruit Training and normally returns to active duty within one year to complete Initial Skill Training.

Attrition in Recruit Training

A final factor in the computation of loads is the projection of the rate and timing of attrition. Recruits may fail to complete training for medical reasons, inability to absorb the instruction, lack of motivation, disciplinary problems, or a variety of administrative causes, such as discharge for fraudulent enlistment or family hardship.

The table below shows projected attrition rates, which are projected to increase about 1.5% from the FY98 MMTR projections (with the exception of the Navy, which remains the same).

TABLE III-4. Recruit Training Attrition Projections
(Active and Reserve Combined)

	Army	Navy	Marine Corps	Air Force
FY98	7.7%	9.0%	16.8%	8.9%
FY99	8.1%	9.0%	16.8%	8.9%

The timing of attrition varies from situation to situation. In the case of slow learners or individuals who have difficulty in adjusting to military life, trainees usually are reentered or given special instruction. Those who do not respond adequately may not become attrition losses until late in the course.

Army One-Station Unit Training

The Army's One-Station Unit Training (OSUT) program combines Recruit Training and Initial Skill Training into a single continuous course (primarily for male soldiers in selected combat arms MOSs and male and female soldiers in selected combat support MOSs). This report treats OSUT separately rather than arbitrarily breaking it into two segments.

TABLE III-5. OSUT Training Load

Service Component	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Army							
Active	5,640	5,575	5,494	5,435	5,400	6,707	7,242
Reserve	897	575	418	498	475	552	595
Natl Guard	2,058	1,874	1,630	1,863	1,974	2,047	2,189
Total	8,595	8,024	7,542	7,796	7,849	9,306	10,026

TABLE III-6. OSUT Training Input, Output, and Load

Service	FY98			FY99		
Component	Input	Output	Load	Input	Output	Load
Army						
Active	25,773	23,050	6,707	26,792	23,163	7,242
Reserve	2,223	1,906	552	2,359	1,911	595
Natl Guard	9,518	8,859	2,047	9,819	8,526	2,189
Total	37,514	33,815	9,306	38,970	33,600	10,026

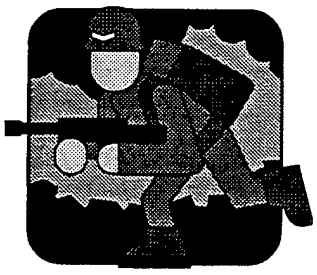
In FY 1999 approximately 31 percent of Army Active and Reserve Component entrants will be trained under OSUT. OSUT is conducted for 12 military occupational specialties within the six major skill areas described in Table III-7 below. Four courses are offered within each OSUT specialty.

TABLE III-7. OSUT Training Time
(Weeks)

Skill Area	Training Time
Infantry a/	13 weeks, 3 days
Artillery	16 weeks, 2 days
Armor	15 weeks
Engineer b/	14 weeks
Military Police b/	17 weeks
Chemical b/	19 weeks

a/ 11M soldiers require an additional 3 weeks of training for heavy vehicle track qualifications.
b/ Skill areas open for female soldiers

OSUT training will be increased by one week, effective October 1998, to allow a more intense, more rigorous soldierization and the inculcation of Army core values. In general OSUT requires less training time than the separate recruit training and initial skill training courses that it replaces. The time required to complete Recruit Training and the Initial Skill Training in separate courses for these skills would be about 4 weeks longer, including the time required to move the trainee from one training organization to another. The shorter OSUT course lengths provide a significant saving in trainee man-years and, consequently, in trainee pay, allowances, and support costs.



IV

OFFICER ACQUISITION TRAINING

General Description

Officer Acquisition Training consists of training and education programs leading to a commission in one of the Military Services. These programs fulfill the need both for junior officer entrants into the career force and for non-career junior officers in the force structure. Officer Acquisition Training programs produce officers for both the active forces and the Reserve Components.

ROTC and Health Professions Acquisition Programs

The total training loads in Table IV-2 on the following page do not include three types of Officer Acquisition Training: the Army, Navy, and Air Force Reserve Officers' Training Corps (ROTC) programs, the Armed Forces Health Professions Scholarship program, and the Marine Corps' Platoon Leaders Class (PLC). Students who make up the training loads discussed in this report are either members of the active forces or members of the Reserve Components being trained on active duty by the active establishments. ROTC, Health Professions Scholarship and PLC students are not in active military status, but features of the programs are discussed in this chapter to provide a complete account of Officer Acquisition Training. The following table shows the number of participants in these programs in the period FY 1996 through FY 1999.

TABLE IV-1. Average Enrollees, Senior ROTC

	FY96	FY97	FY98	FY99
Service				
Army	41,367	36,603	34,785	35,849
Navy	5,678	5,631	6,163	6,163
Air Force	14,380	14,231	13,808	14,006
Total	**61,425**	**56,465**	**54,756**	**56,018**

TABLE IV-2. Total Officer Acquisition Training Load

Service Component	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Army							
Active	4,877	5,593	4,917	4,753	4,857	4,883	4,827
Reserve	551	112	102	119	124	120	132
Natl Guard	45	34	45	46	56	62	69
Navy							
Active	5,839	5,839	5,596	5,635	5,527	5,577	5,501
Reserve	15	15	0	0	0	0	0
Marine Corps							
Active	509	504	431	766	462	607	601
Reserve	112	140	118	123	146	164	146
Air Force							
Active	4,579	4,485	4,664	5,419	5,238	5,268	5,261
Reserve	1,433	1,654	1,562	1,573	1,477	1,485	1,485
Natl Guard	0	0	0	0	3	5	5
Total							
Active	15,804	16,421	15,608	16,573	16,084	16,335	16,190
Res/Gd	2,156	1,955	1,827	1,861	1,806	1,836	1,837
Total	**17,960**	**18,376**	**17,435**	**18,434**	**17,890**	**18,171**	**18,027**

Officer Requirements and Structuring the Officer Acquisition Program

Requirements for new officers, like requirements for new enlisted personnel, are a product of the need for officers in the projected force as compared to the projected future inventory of officers. Properly functioning programs fill the gross number of officer entrants for any given year and provide an even flow of sufficient new officers to each Service to avoid the emergence of unmanageable shortages and overages by age and grade in the future. Each of the Services uses a mix of sources for new officers.

Officer Acquisition Training may be divided into six separate programs:

- Service Academies
- ROTC
- Officer Candidate Schools
- Off-Campus Commissioning Programs
- Other Enlisted Commissioning Programs
- Health Professions Acquisition Programs

Each of these programs have different characteristics. The Service Academies and ROTC programs, for example, provide a stable input of officers, but require long lead-times before changes in output can be made. Officer candidate programs, on the other hand, can quickly respond to increased or decreased requirements for officers. The Services exploit these differences in planning and executing their officer procurement programs. In addition to these practical considerations, having a variety of commissioning sources opens officership opportunities to a wider segment of the population.

Service Academies

The mission of each of the Service Academies (United States Military Academy, United States Naval Academy, and United States Air Force Academy) is to meet a portion of the long-range requirement for career military officers. They provide instruction and experience to cadets or midshipmen so that they graduate with the knowledge and character essential to leadership and with the motivation to become career officers. Cadets and midshipmen receive a rigorous four-year undergraduate college education that includes a technically oriented core curriculum regardless of major. Successful completion of the specified academic, leadership and military requirements entitles the graduate to a Bachelor of Science degree and a commission in one of the Military Services. Up to one-sixth of each year's Naval Academy graduates may be commissioned in the Marine Corps.

The Service Academies are distinctive in that their curricula are specifically designed to prepare young men and women for duty as professional officers. The total curriculum at each Academy is designed to develop the qualities of character, intellect, and physical competence needed by the officer who may, in the course of a full career, be called upon to perform duties ranging from leading a small combat unit to advising the highest government councils. The curricula, which include the sciences, the humanities, and military and physical training, form the basis for further professional development or, when required, graduate education.

The maximum enrollment at each of the Service Academies is established by law. This fact establishes relatively stable training loads for the Academies. Training data for the Service Academies are shown in Table IV-3. [NOTE: Inputs = new freshmen; Grads = graduating seniors.]

TABLE IV-3. Training Input, Output and Load, Service Academies

	FY96 Load	FY97 Load	FY98 Input	FY98 Grads	FY98 Load	FY99 Input	FY99 Grads	FY99 Load
Service								
Army	3,861	3,905	1,190	897	4,026	1,190	968	4,065
Navy	4,001	3,955	1,168	915	3,942	1,170	877	3,973
Air Force	4,043	4,101	1,243	955	4,109	1,272	973	4,115
Total	**11,905**	**11,961**	**3,601**	**2,767**	**12,077**	**3,632**	**2,818**	**12,153**

Each of the Military Departments sponsors an Academy preparatory school. Marine Corps and Coast Guard personnel attend the Navy school. The mission of these schools is to provide approximately one year of intensive instruction and guidance to selected enlisted personnel in preparation for entry to the Service Academies. Students compete for nominations by the Secretaries of the Military Departments and from other sources. The Naval Academy Preparatory School also provides instruction to candidates for the Marine Corps Enlisted Commissioning Education Program during the summer months. Training load data for the Academy preparatory schools is shown in Table IV-4.

TABLE IV-4. Training Input, Output, and Load, Academy Preparatory Schools

	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Service								
Army	167	166	232	198	179	220	176	165
Navy	158	149	250	194	163	250	194	163
Marine Corps	13	13	17	14	13	17	14	13
Air Force	212	211	230	184	207	230	184	207
Total	**550**	**539**	**729**	**590**	**562**	**717**	**568**	**548**

ROTC Programs

ROTC is a long lead-time program that is the single largest source of officers for the Armed Forces. Like the Service Academies, ROTC is used to provide a relatively constant input of officers for active duty. The program is currently conducted at approximately 450 civilian colleges and universities throughout the nation. The Army,

Navy, and Air Force each sponsor an ROTC program. Up to one-sixth of the Navy ROTC graduates may be commissioned into the Marine Corps. In addition to conventional recruiting and advertising methods, scholarships and subsistence allowances are used to attract qualified students. Scholarships are awarded to young men and women who exhibit potential ability as officers and have interests in fields of projected Service needs.

There are both scholarship and non-scholarship, as well as two-year and four-year, ROTC programs. The curriculum of each program is tailored to the needs of the individual Services. For example, the Navy teaches the basics of ship navigation, while the Army teaches the fundamentals of ground combat and the Air Force provides basic instruction in aerospace history and doctrine. Each of the programs includes instruction in leadership, military customs and military history, and each program provides prospective officers with a gradual transition from the civilian environment to the military environment. Each ROTC program consists of a series of regularly scheduled academic classes throughout the school year combined with mandatory summer camps or cruises that are designed to give the student realistic military experience and a first-hand view of military life.

The ROTC scholarship continues to be an important incentive to attract exceptionally qualified individuals to ROTC. The rising cost of education makes the scholarship even more attractive. The Navy will fund an average of 4,580 scholarships in FY 1999, the Army 8,765 and the Air Force 5,747.

Reduced force structure requires fewer officers and the ROTC Program is being downsized accordingly. The Army now has 270 (down from 272 in FY98) host institutions and the Air Force has 143 (same as FY98). The Navy remains at 57 host institutions.

As noted at the beginning of this chapter, the ROTC program is not included in Service training loads because the students are not in an active military status. The following table shows the three Service ROTC programs for FY 1998 and FY 1999.

TABLE IV-5. Senior ROTC Programs				
	Beginning Enrollments	Graduates	Average Enrollments	Average Number of Scholarship Enrollees
FY98				
Army	36,325	3,680	34,785	8,468
Navy	6,064	912	6,163	4,580
Air Force	14,732	1,960	13,808	5,704
Total	**57,121**	**6,552**	**54,756**	**18,752**
FY99				
Army	37,620	3,463	35,849	8,765
Navy	5,925	1,275	6,163	4,580
Air Force	14,943	2,153	14,006	5,747
Total	**58,488**	**6,891**	**56,018**	**19,092**

Off-Campus Commissioning Programs

The only Officer Acquisition Training program off the college campus is the Marine Corps Platoon Leaders Class (PLC). This program provides for enlistment as a Marine Corps Reservist while the student is still an undergraduate. All PLC training takes place in the summer. For freshmen and sophomores, PLC consists of two six-week training sessions at the Marine Corps Officer Candidate School in Quantico, Virginia. Juniors attend one ten-week session. As with the ROTC program, training loads for the PLC program are not included in this report because PLC students are not in an active military status.

Students participating in this program attend either one or two summer training sessions, depending upon when during their college career they were enrolled. The objective of the program is to indoctrinate, motivate and train the enrollees by providing instruction in basic military subjects, leadership and physical conditioning. PLC students are commissioned when their college degrees are conferred. Newly commissioned Marine Corps officers then attend The Basic School at Quantico, Virginia.

Officer Candidate Schools (OCS)

Each of the Military Services operates an Officer Candidate School. The Air Force school is entitled Officer Training School (OTS).

Enlisted members can use this route to "rise from the ranks." The existence of OCS and the other enlisted commissioning programs covered in the next section is a significant advancement incentive to ambitious and promising enlisted personnel.

The four Services offer direct entry into OCS to selected college graduates without previous enlisted service. Some college students in highly specialized academic disciplines, such as engineering and physical sciences, cannot afford the time required to participate in ROTC. The OCS program commissions well-qualified college students who desire to become officers after graduation.

The following tables show average course length and load data for Officer Candidate Schools.

TABLE IV-6. FY99 Course Length in Weeks
Officer Candidate School

Army OCS	Navy OCS	Marine Corps OCS	Air Force OTS
6	13	10	12.7

TABLE IV-7. Training Input, Output, and Load, Officer Candidate Schools

Service Component	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Army								
Active	210	193	1,475	1,396	247	1,528	1,395	250
Reserve	19	19	537	465	21	620	537	27
Natl Guard	32	31	592	536	38	623	541	47
Navy								
Active	224	269	1,200	983	273	1,200	983	273
Reserve	0	0	0	0	0	0	0	0
Marine Corps								
Active	142	87	963	712	161	945	680	154
Reserve	0	0	0	0	0	0	0	0
Air Force								
Active	129	55	315	315	91	315	315	91
Reserve	13	16	84	84	24	84	84	24
Natl Guard	0	0	0	0	0	0	0	0
DoD								
Active	705	604	3,953	3,406	772	3,988	3,373	768
Res/Gd Tot	64	66	1,213	1,085	83	1,327	1,162	98
Total	**769**	**670**	**5,166**	**4,491**	**855**	**5,315**	**4,535**	**866**

Other Enlisted Commission Programs

The Services each have enlisted commissioning programs in addition to Officer Candidate Schools. The purposes of these programs are: (I) to provide a source of officers in specific skills with an expected high rate of retention; (2) to provide an avenue whereby enlisted personnel with proven qualifications can augment the commissioned ranks; and (3) to provide a measure of motivation to enlisted personnel. The Navy's Enlisted Commissioning Programs now number seven. A similar program, the Marine Enlisted Commissioning Education Program, has been expanded to offer degrees in technical and liberal arts academic disciplines. Students in the USAF Airman Education and Commissioning Program (AECP) major in engineering and computer science, physical science, or selected health care professions, with matriculation up to three years. The average academic time spent in the program is about 30 months. In the Navy, Marine Corps and Air Force, participants attend the Officer Candidate School of their Service before they are commissioned. Like OCS/OTS, these education programs carry an active duty service requirement. In FY

OCS/OTS, these education programs carry an active duty service requirement. In FY 1988 the Army began reporting the warrant officer candidate program in this category. While the other Services' participants are all on active duty, the Army's program also includes members of the Reserve and National Guard.
The Navy's Officer Sea and Air Mariner (OSAM) Program provides officer accessions directly into the Naval Reserve. The program covers all phases of training from Officer Candidate School to specific training in a designated warfare specialty. Training is completed after approximately two years and individuals are released from active duty to complete a four-year drilling obligation with the Selected Reserve.

The following table displays load data for these programs. All participants are members of the active forces.

TABLE IV-8. Training Input, Output, and Load
Other Enlisted Commissioning Programs

	FY96	FY97	FY98			FY99		
	Load	Load	Input	Output	Load	Input	Output	Load
Service								
Army	191	211	1,322	1,410	216	1,411	1,355	212
Navy	1,252	1,154	949	843	1,199	819	830	1,092
Marine Corps	611	362	410	358	433	425	358	434
Air Force	92	102	28	27	72	23	22	59
Total	2,146	1,829	2,709	2,638	1,920	2,678	2,565	1,797

Health Professions Acquisition Programs

This subcategory may be conveniently divided into two parts, the Armed Forces Health Professions Scholarship Program and the Uniformed Services University of the Health Sciences Program.

The Health Professions Scholarship Program was established in 1972 by Public Law 92-426. Participants are selected from among students or those accepted for enrollment in recognized health professions schools. Participants are commissioned in grade 0-1 in the Reserve of their parent Service, but except for a short period of annual active duty, are not in active status. They are, therefore, not included in the training loads of their Services. Upon graduation, participants must serve obligated tours of duty, the length of which depends on the length of their participation in the program.

Service data for FY 1998 and FY 1999 are shown in Table IV-9.

TABLE IV-9. Health Professions Acquisition Program, Scholarships Awarded, and Graduates		
Service	**Scholarships**	**Graduates**
FY98		
Army	1,391	335
Navy	1,346	382
Air Force	1,372	405
Total	**4,109**	**1,122**
FY99		
Army	1,459	336
Navy	1,355	356
Air Force	1,372	405
Total	**4,186**	**1,097**

V

SPECIALIZED SKILL TRAINING

General Description

Specialized Skill Training provides officer and enlisted personnel with skills and knowledge needed to perform specific jobs. Each Service has established a job structure that makes it possible to carry out assigned missions. Each Service's mission is supported by an established job structure and each position within that job structure has been analyzed to determine the skill it requires. Specialized Skill Training provides these required skills to the proper number of individuals in a phased manner so that each vacancy in the structure can be filled promptly with a qualified replacement.

Specialized Skill Training, as used in this report, is defined as:

> Initial, progression and functional training for both officer and enlisted personnel. Specialized Skill Training includes such programs as Army Advanced Individual Training, Navy Apprenticeship Training and Marine Combat Training. This training category also includes aviation-related ground training and initial enlisted leadership training other than that carried in Professional Development Education.

Army One-Station Unit Training (OSUT) provides Army personnel with job-related training in a number of skills. However, since OSUT is conducted as one course that combines Recruit and Specialized Skill Training, it is treated separately in this report (see Chapter III). *OSUT loads are not included in the Specialized Skill Training loads in this chapter.*

Specialized Skill Training loads for Active and Reserve Components are programmed at about the same levels in FY 1998 and FY 1999 as in FY 1997. Reserve and Guard officers and enlisted personnel beyond the initial entry stage are generally trained by the Active establishment. DoD wide, the requirement to improve the technical skills of career personnel to keep pace with new equipment acquisition and modifications to the existing inventory will continue into the foreseeable future. This is reflected in the estimated Specialized Skill Training load.

Specialized Skill Training loads for FY 1993 through FY 1999 are as shown in Table V-1.

TABLE V-1. Specialized Skill Training Load

Service Component	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Army a/							
Active	30,424	28,250	25,415	23,854	24,306	26,847	28,073
Reserve	4,961	4,409	3,425	3,330	3,462	4,046	4,139
Natl Guard	4,540	4,731	3,723	3,258	3,568	4,311	4,064
Navy							
Active	28,391	25,353	22,034	21,444	22,362	21,737	20,036
Reserve	676	757	495	374	243	385	368
Marine Corps							
Active	8,004	9,702	8,000	11,301	10,891	10,971	11,215
Reserve	1,052	1,061	874	1,364	1,253	1,544	1,726
Air Force							
Active	11,376	10,245	11,175	9,966	11,565	13,179	13,020
Reserve	1,181	884	851	613	1,105	1,190	1,165
Natl Guard	1,680	1,802	1,719	1,623	2,276	2,651	2,652
Total							
Active	78,195	73,550	66,624	66,565	69,124	72,734	72,344
Res/Gd	14,090	13,644	11,087	10,562	11,907	14,127	14,114
Total	**92,285**	**87,194**	**77,711**	**77,127**	**81,031**	**86,861**	**86,458**

a/ Army One-Station Unit Training load is not included.

As in the other types of training covered in this report, the demand placed on the training establishment for individuals is determined by comparing projected requirements for each skill area and skill level with the projected future inventory of trained service members.

When anticipated losses are deducted from the current inventory, shortages in various skill areas are revealed. These shortages, except for those that can be satisfied through on-the-job training, or, in a few cases, through lateral entry of individuals who already possess needed job skills from civilian life, create a demand for a phased output of trained replacement personnel. Also, estimates are made of the proportion of students in each training course who will fail to complete the course. These course attrition factors determine the inputs necessary to achieve the desired course outputs. Inputs, outputs, attrition patterns, and course lengths determine the training loads.

These factors are discussed for each sub-category of Specialized Skill Training in the remainder of this chapter.

One of the challenges facing the Reserve Components is matching an individual's occupational specialty to a specific billet. A majority of the specialties or ratings require formal school training prior to designation. Since limited availability for active duty prevents members of the Selected Reserve from attending many formal schools, initial skill training programs are being developed to train prior-service Reservists in selected occupational specialties using combinations of two-week formal schools, on-the-job training, distance learning, correspondence courses, mobile training teams and civilian vocational technical courses.

Specialized Skill Training is the most diverse of the major categories of individual training. In the interest of clarity, the full category has been divided into five sub-categories. Two are concerned with initial skill training, one for officers, the other for enlisted personnel. Two others cover more advanced training, again divided by officer and enlisted. The last category covers both officer and enlisted training that conveys required knowledge or skills without changing the student's primary skill or skill level.

Initial Skill Training (Enlisted)

Initial Skill Training (Enlisted) includes all formal training normally given immediately after Recruit Training and leading toward the award of a military occupational specialty or rating at the lowest skill level. Successful completion of the training qualifies the enlisted member to take a position in the job structure of the Service and to progress to the journeyman level through job experience. Army One-Station Unit Training which is conducted primarily for those soldiers in combat arms and some selected combat support MOSs satisfies this same purpose but, because it combines skill training with recruit training in a single course, it is treated separately in this report.

The great majority of Service recruits are drawn from the least skilled segment of the population. Most recruits are under age 21 and have little civilian job experience. In addition, some civilian specialties are not in demand in the military job structure, and many of the most important military skills have no civilian counterpart. Consequently, only a small number of people enter the Service with a skill that can be used with little or no additional training. Enlistees must be trained in a technical skill before they can become productive. Some skills can be acquired through experience and on-the-job training. The vast majority, however, are most effectively and efficiently learned through formal courses. In some situations -- for example, on board ship or in remote locations -- the opportunity for on-the-job training is limited.

Load data for Initial Skill Training (Enlisted) are displayed in Table V-2. The classification of this training is determined by its purpose, rather than by whether entrants attend immediately after Recruit Training. Thus, some prior-service students and cross-trainees from other skill areas are reflected in these data.

TABLE V-2. Training Input, Output, and Load
Initial Skill Training (Enlisted)

Service Component	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Army								
Active	8,429	10,628	52,537	50,079	12,015	55,119	52,353	12,582
Reserve	2,301	2,215	16,035	15,524	2,935	15,650	15,422	2,904
Natl Guard	2,201	2,428	16,234	16,106	3,254	15,483	15,442	3,156
Navy								
Active	10,235	10,206	77,282	72,711	10,138	68,437	64,734	9,061
Reserve	215	140	1,126	1,085	178	1,010	977	160
Marine Corps								
Active	5,915	5,387	37,341	36,421	5,399	39,083	38,145	5,729
Reserve	1,064	806	8,235	8,059	1,070	9,320	9,134	1,173
Air Force								
Active	6,596	7,340	41,530	38,740	8,946	41,284	38,510	8,893
Reserve	431	788	4,028	3,757	824	4,005	3,795	817
Natl Guard	1,177	1,733	9,552	8,910	2,058	9,601	8,956	2,068
DoD								
Active	31,175	33,561	208,690	197,951	36,498	203,923	193,742	36,265
Res/Gd Tot	7,389	8,110	55,210	53,441	10,319	55,069	53,726	10,278
Total	**38,564**	**41,671**	**263,900**	**251,392**	**46,817**	**258,992**	**247,468**	**46,543**

New mission requirements and technological change have resulted in consolidating or splitting skill areas and extensive modification of existing training programs. For instance, the introduction of word processors and microcomputers into Air Force personnel, administration and resource management offices has increased the percentage of new accessions requiring formal training for these skills.

Reserve trainees graduating from Recruit Training proceed to Initial Skill Training in their occupational specialty. This may consist of a course in a Service school or Advanced Individual Training at an Army training center. The actual length of active duty training, in comparison with the statutory twelve weeks minimum, varies from twelve weeks to twelve months, depending on the occupational specialties involved. To accommodate the Reserve Component member, a split-training program allows completion of initial entry training in two training segments in a two-year period.

The variety of skills required in the four Services dictates a large number of courses for enlisted personnel in Initial Skill Training, as shown in the following table.

TABLE V-3. Number of Courses, Initial Skill Training (Enlisted)				
	Army	Navy	Marine Corps	Air Force
FY99	206	133	202	232

Course lengths vary widely based on the complexity of the subject matter. For example, the Air Force course for cytotechnology specialists is 52 weeks long; but the course for aerospace maintenance is only 1.4 weeks long. Table V-4 shows the average course lengths for the Services' Enlisted Initial Skill Training.

TABLE V-4. Average Course Length, Initial Skill Training (Enlisted) (Academic Days in Training)				
	Army	Navy	Marine Corps	Air Force
FY99	55	45	77	52

Initial Skill courses include general skills, intelligence, cryptography and health service training. Some of these courses (for example, nuclear reactor specialist or electronics technician) are highly technical. Others involve less complex skills -- cook, clerk-typist, and vehicle driver. A sampling of high-volume courses is shown in the Table V-5.

TABLE V-5. Initial Skill Training Courses with High Student Flow		
FY99	Student Input	Course Length (Weeks)
Army		
Medical Specialist	7,345	10.0
Food Service Specialist	4,211	8.2
Automated Logistics Specialist	3,897	12.0
Motor Transport Operator	3,861	6.0
Light Wheel Vehicle Mechanic	3,431	10.0
Unit Supply Specialist	3,192	7.3
Administrative Specialist	2,902	5.0
Petroleum Supply Specialist	2,892	8.4
Signal Support Systems Specialist	2,144	17.0
Multichannel Transmission Sys Op/Mnt	1,642	13.3
Navy		
Apprentice Training	7,538	2.7
Engineering Common Core	5,957	2.7
Avionics Common Core Class A	4,111	7.1
Advanced Electronics Technical Core	3,014	23.7
Basic Enlisted Submarine	2,836	4.7
Hospital Corpsman, Basic	2,534	14.0
Basic Submarine Damage Control	2,100	0.4
Engineering Mechanical Core	1,838	3.4
Nuc Fld Class A Sch Machinist Mate	1,531	12.7
Aviation Structural Mech Common Core	1,374	5.6
Marine Corps		
Rifleman	6,680	5.0
Motor Transport Operator	2,013	6.0
Field Radio Operator (FROC)	1,396	8.4
Automotive Org Maintenance	920	11.9
Mortarman	895	2.1
Administrative Clerk	873	6.3
Machine Gunner	811	2.1
Enlisted Supply Basic	727	7.0
Military Police	693	9.0
Food Service Specialist	660	8.3
Air Force		
Supply Management Apprentice	1,891	7.8
Security Apprentice	1,815	4.0
Information Management Apprentice	1,358	4.4
Medical Service Apprentice - Phase II	1,358	7.8
Medical Service Apprentice	1,304	13.4
Security Apprentice (GCS)	1,173	5.2
Personnel Apprentice	1,155	5.8
Law Enforcement Apprentice (Navy)	1,020	4.4
Apprentice Comm-Computer Systems	889	12.6
Law Enforcement Apprentice	846	5.2

The final determinant of training loads is the anticipated rate of attrition. Attrition rates must be estimated for each course. A routine course may have low attrition while attrition may run high in complex technical courses. Unlike Recruit Training, students who fail Initial Skill Training usually are not discharged but re-trained in other, less difficult skills. The Services have implemented numerous initiatives to manage attrition; the average anticipated attrition rates are shown below.

TABLE V-6. Average Attrition Rates, Initial Skill Training (Enlisted)

	Army	Navy	Marine Corps	Air Force
FY98	3.4%	5.0%	2.2%	3.1%
FY99	3.6%	5.0%	1.5%	3.1%

Skill Progression Training (Enlisted)

This sub-category covers skill training received by enlisted personnel after Initial Skill Training. Through this training the student gains the knowledge to perform at higher skill levels or in a supervisory position. Skill Progression Training is most frequently given after Service members have gained experience through actual work in their specialty. In some cases, however, training in a relatively narrow subject area as an immediate follow-on to Initial Skill Training is included in Skill Progression Training. Training load data for Skill Progression Training (Enlisted) are shown in Table V-7.

TABLE V-7. Training Input, Output, and Load
Skill Progression Training (Enlisted)

Service	FY96	FY97	FY98			FY99		
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	6,337	4,687	35,104	32,608	4,941	37,350	34,885	5,534
Reserve	431	545	2,238	1,816	605	1,679	1,719	655
Natl Guard	273	264	1,433	1,389	282	1,187	1,131	249
Navy								
Active	6,123	6,603	55,130	53,625	6,464	53,500	52,043	6,031
Reserve	59	20	1,201	1,161	84	1,191	1,151	88
Marine Corps								
Active	2,403	2,150	16,548	16,017	2,167	14,187	13,828	2,111
Reserve	66	138	1,904	1,830	128	2,444	2,376	203
Air Force								
Active	2,070	2,869	41,888	41,400	2,900	41,644	41,032	2,840
Reserve	132	293	3,876	3,687	266	3,477	3,425	246
Natl Guard	332	466	6,484	6,446	457	6,382	6,344	447
DoD								
Active	16,933	16,309	148,670	143,650	16,472	146,681	141,788	16,516
Res/Gd Tot	1,293	1,726	17,136	16,329	1,822	16,360	16,146	1,888
Total	**18,226**	**18,035**	**165,806**	**159,979**	**18,294**	**163,041**	**157,934**	**18,404**

The requirement for Skill Progression Training arises from the fact that training in a skill at entry level and subsequent experience do not, in many cases, fully qualify service members to do the more advanced jobs in their field. Several factors may contribute, singly or in combination, to a need for additional formal training:

1. The introduction of new equipment.
2. The need to produce a higher degree of skill in a sub-specialty.
3. The need to impart a broader base of knowledge to qualify an individual for supervisory responsibility.
4. The requirement for refresher training to bring the Service member up to date on the latest information and techniques in a skill.

As in all other types of training, the primary need is to have trained individuals available to replace losses as they occur. Planning future training in this sub-category follows

however, are introduced by the fact that members eligible for schooling are frequently serving overseas or on board ship, rather than flowing from the Recruit Training pipeline. This situation requires scheduling personnel to receive institutional training when they are available, preferably between duty assignments. Reserve Component personnel have similar difficulties attending formal schools because of civilian employer commitments. Service implementation of distance learning has helped to provide alternative delivery of skill progression training from traditional resident settings.

The following table displays course data for Skill Progression Training for each of the Services.

TABLE V-8. Courses, Course Length, and Projected Attrition, Skill Progression Training (Enlisted)

	Army	Navy	Marine Corps	Air Force
FY99 Number of Courses	386	1,520	424	480
Average Course Length (Academic Days)	41	34	58	16
Projected Attrition	5.6%	3.0%	0.9%	0.6%

The Air Force's average days in training is low compared to the other Services because of the heavy use of short courses. The large number of Navy courses is a reflection of the many Navy occupational subspecialties.

Initial Skill Training (Officer)

As a general rule, Officer Acquisition Training is oriented toward the broad educational background and general military training that is considered necessary for all officers entering a Service. Most newly commissioned officers require further training for the specific type of duty they will be performing in their first duty assignment. Initial Skill Training for officers is, therefore, analogous to Initial Skill Training for enlisted personnel. Both provide the job-oriented training which, added to military fundamentals learned earlier, prepares the individual for taking a place in the job structure.

Load data for Initial Skill Training (Officer) are displayed in Table V-9.

TABLE V-9. Training Input, Output, and Load
Initial Skill Training (Officer)

Service	FY96	FY97	FY98			FY99		
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	1,776	1,773	7,040	7,222	2,043	6,730	6,593	1,969
Reserve	176	200	1,566	1,462	244	1,938	1,834	327
Natl Guard	371	454	1,158	1,102	346	1,054	1,055	315
Navy								
Active	577	466	2,056	2,035	486	1,830	1,821	434
Reserve	2	1	99	85	3	88	76	3
Marine Corps								
Active	804	901	2,915	2,900	962	3,058	3,040	1,012
Reserve	2	10	119	119	6	179	179	10
Air Force								
Active	609	687	3,231	3,209	652	2,937	2,916	593
Reserve	12	15	222	203	35	222	218	38
Natl Guard	69	42	530	539	75	529	521	72
DoD								
Active	3,766	3,827	15,242	15,366	4,143	14,555	14,370	4,008
Res/Gd Tot	632	722	3,694	3,510	709	4,010	3,883	765
Total	**4,398**	**4,549**	**18,936**	**18,876**	**4,852**	**18,565**	**18,253**	**4,773**

With minor exceptions, all newly commissioned Army officers attend officer basic courses at their branch schools -- Infantry officers at the Infantry School, Engineer officers at the Engineer School, and so forth. The Army conducts 34 initial officer basic courses with an average course length of 14 weeks. Officers attend before reporting to their initial assignment. In addition, certain officers are selected to attend one of 36 follow-on skill or functional training courses for more specialized assignments.

All submarine and nuclear officers and most Surface Navy officers go to Initial Skill Training. The Navy provides 28 courses for officers in Initial Skill Training, with an average course length of 18 weeks.

All newly commissioned Marine Corps officers attend a basic course for general orientation and training. In addition, most Marine Corps officers attend one of the 61 Initial Skill Training courses sponsored by the Corps. They may also participate in courses conducted by the Navy or other Services. Such courses average 16 weeks in length and are related to specific officer positions.

The Air Force conducts 52 Initial Skill Training courses for officers (which does not include 21 Flight Training courses), with an average length of 14 weeks. The percent of newly commissioned officers attending these courses is increasing. In FY97, 90% attended; and projections for FY98 and FY99 are 90% and 92% respectively. The Air Force sends newly commissioned officers to initial skills courses within six months of their commissioning.

Skill Progression Training (Officer)

Skill Progression Training for officers is, in general, aimed at officers with several years of practical experience and provides them knowledge needed to assume more advanced responsibilities. For example, the Army provides advanced courses that are structured to prepare the students for battalion and brigade staff duties in addition to command responsibilities at the company and battery level. Data for Skill Progression Training (Officer) are displayed in the following table.

TABLE V-10. Training Input, Output, and Load
Skill Progression Training (Officer)

Service	FY96	FY97	FY98			FY99		
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	2,287	2,276	11,918	11,566	2,293	11,984	11,823	2,377
Reserve	183	243	2,070	2,061	113	2,065	2,005	111
Natl Guard	184	196	2,019	1,996	143	1,962	1,928	138
Navy								
Active	856	822	6,436	6,406	754	6,270	6,242	732
Reserve	17	18	281	266	34	278	263	33
Marine Corps								
Active	300	241	2,447	2,423	263	2,309	2,290	275
Reserve	4	7	410	406	10	493	492	23
Air Force								
Active	504	433	10,723	10,650	448	10,701	10,628	438
Reserve	11	8	727	751	25	726	724	24
Natl Guard	22	12	556	564	22	555	554	22
DoD								
Active	3,947	3,772	31,524	31,045	3,758	31,264	30,983	3,822
Res/Gd Tot	421	484	6,063	6,044	347	6,079	5,966	351
Total	**4,368**	**4,256**	**37,587**	**37,089**	**4,105**	**37,343**	**36,949**	**4,173**

The Army conducts 198 courses averaging 40 days in length. The Navy maintains 114 courses averaging 45 days in length. Navy courses cover a variety of specialized duties that are typically performed by officers with several years of service; for example, aviation maintenance officer course and nuclear propulsion plant course.

Both the Marine Corps and the Air Force conduct broad courses for officers at about the same level as the Army's advanced courses; however, as these are Service-wide and uniform in content, they are carried in Professional Development Education in this report. Within Skill Progression Training, Marine Corps officers attend 249 courses, averaging 40 days in length. They also utilize the course offerings of the other Services. The Air Force has 159 courses, averaging 9 academic days each, which train officers in new duties required by their prospective assignments.

Attrition from the Skill Progression courses for officers is significantly lower than for enlisted or initial skill officer training. Attrition of less than one percent is typical of such courses.

The Air National Guard (ANG) also conducts specialized skill progression training in several aviation disciplines at ANG installations. Air Force facilities cannot be used for this training due to constrained training time available for the reservist, geographic dispersion of units, availability of training equipment and location of training areas.

Functional Training (Officer and Enlisted)

Functional Training is an "all other" sub-category covering those types of required training that do not fit neatly into the definitions of the other sub-categories. Functional Training may also be described as training for a specific assignment or duty position. On the whole, Functional Training is in subject areas that cut across the scope of military occupational specialties and provides additional required skills without changing the student's primary specialty or skill level. For example, in the Air Force only survival training is considered functional training. Both officers and enlisted personnel participate in Functional Training. Load data for Functional Training are shown in Table V-11.

TABLE V-11. Training Input, Output, and Load
Functional Training (Officer and Enlisted)

Service	FY96	FY97	FY98			FY99		
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	5,025	4,942	57,137	51,012	5,555	56,578	51,130	5,611
Reserve	239	259	4,469	4,551	149	3,862	3,845	142
Natl Guard	229	226	3,819	3,761	286	4,643	4,478	206
Navy								
Active	3,653	4,265	323,423	316,990	3,895	313,965	307,695	3,778
Reserve	81	64	12,552	12,305	86	12,249	12,006	84
Marine Corps								
Active	1,879	2,212	37,534	33,810	2,180	35,940	32,403	2,088
Reserve	228	292	6,114	5,491	330	5,966	5,385	317
Air Force								
Active	187	236	5,458	5,383	233	5,743	5,662	256
Reserve	27	1	850	841	40	850	841	40
Natl Guard	23	23	880	872	39	992	982	43
DoD								
Active	10,744	11,655	423,552	407,195	11,863	412,226	396,890	11,733
Res/Gd Tot	827	865	28,684	27,821	930	28,562	27,537	832
Total	**11,571**	**12,520**	**452,236**	**435,016**	**12,793**	**440,788**	**424,427**	**12,565**

Army Functional Training includes the airborne, ranger, and special forces qualification courses, many specialized NCO supervision courses, language training, and a number of courses related to specialized equipment, e.g., Satellite Communication Operation and Maintenance. The number of functional courses conducted at Training MACOMs has declined as a result of course consolidations and elimination.

Navy Functional Training differs from that of the other Services because of the very high input to a large number of very short courses. Most of the training is conducted while the ship is in port and includes the following types of activity:

1. Shore training for shipboard teams (firefighting, damage control, anti-submarine warfare, and so forth).

2. Short basic or refresher courses at fleet training centers in the operation of equipment or systems (TOMAHAWK operations and maintenance, SH-60B system familiarization, and 50 cal. machine gun operations).

3. Shipboard in-port training assistance (combat systems, advanced acoustic analysis and command excellence seminar mobile training teams).

4. Pre-commissioning training for newly formed crews of ships under construction (damage control, Combat Information Center team training and radar navigation team training).

Marine Corps functional training provides skills necessary to perform a specific mission outside of the normal primary occupational specialty. Examples of functional training courses taught at Marine institutions are Marine Corps Security Guard, Scout-Sniper, Range Officer, Drill Instructor, and Cold Weather Survival.

Most Air Force Functional Training is survival training related to various environments: water, arctic, jungle, or tropic. These courses train air crews skills needed for long-term combat survival and survival in chemically, biologically, and radiological contaminated environments.

The following table provides course data for Functional Training.

TABLE V-12. Courses, Course Length, Functional Training

	Army	Navy	Marine Corps	Air Force
FY98 Number of Courses	1,099	1,562	179	8
Average Course Length (Training Days)	19	6	17	19
FY99 Number of Courses	1,093	1,525	145	8
Average Course Length	25	6	19	19

VI

FLIGHT TRAINING

General Description

Flight Training programs provide basic flying skills required prior to operational assignment of pilots, navigators, and naval flight officers. Most of the training in this category is undergraduate flight training. At the conclusion of this training, a graduate is awarded "wings" and is classified as a "designated" or "rated" officer. Flight Training includes programs for pilots of all Services, navigators in the Air Force, and naval flight officers in the Navy and Marine Corps. Pilot training may be in jet or propeller-driven fixed-wing aircraft, or in helicopters. Some related advanced flight training, such as Army instructor pilot training, is also included in Flight Training. Enlisted programs in aviation related subjects (for example, in air traffic control) and Air Force survival training are in Specialized Skill Training. Marine Corps enlisted navigator training is included in Flight Training.

Reservists fill critical billets as Naval Flight Officers. The students enter the pipeline on extended active duty and are trained at the Aviation Officers Candidate School (AOCS) with their active duty counterparts. After completing all formal specific aircraft training, they are released from active duty to receive their proficiency training with a Naval Air Reserve squadron. The proficiency or operational training is not included in the training loads of this report.

Generally, Reserve Component participation in Flight Training is relatively minor, since most aviator requirements in Reserve units are filled by experienced aviators who join after extended service in the active components.

Flight Training loads, by Service and component, for Fiscal Years 1993 through 1999 are shown in Table VI-1

TABLE VI-1. Total Flight Training Load							
Service Component	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Army							
Active	762	745	752	699	657	732	794
Reserve	61	47	30	12	12	9	12
Natl Guard	183	180	151	152	134	176	182
Navy							
Active	1,553	1,046	1,586	1,158	1,324	1,397	1,488
Reserve	0	0	0	0	0	0	0
Marine Corps							
Active	495	548	493	490	471	524	524
Reserve	0	0	0	0	0	0	0
Air Force							
Active	806	819	904	1,154	1,190	1,659	1,784
Reserve	33	25	38	41	47	66	75
Natl Guard	185	174	138	111	139	201	283
Total							
Active	3,616	3,158	3,735	3,501	3,642	4,312	4,590
Res/Gd	462	426	357	316	332	452	552
Total	**4,078**	**3,584**	**4,092**	**3,817**	**3,974**	**4,764**	**5,142**

For purposes of clarity, the following discussion of aviation training is divided into three sections -- Undergraduate Pilot Training, Navigator Training and All Other Flight Training.

Undergraduate Pilot Training

Undergraduate Pilot Training qualifies students to perform the flight duties and to assume the responsibilities of military pilots. Air Force courses include sufficient flying training to allow the student to attain proficiency in the general class of aircraft flown in future assignments. Flying training is augmented by flight-related ground training and simulator training. The Army uses a large number of warrant officer pilots. Enlisted entrants attend Warrant Officer Candidate School and upon graduation receive a conditional warrant appointment to warrant. Conditional warrants convert to Warrant Officer upon successful completion of flight training. Some Army flight training students are already commissioned officers or warrant officers prior to entering flight training.

Training data for FY 1996 through FY 1999 are displayed in the following table.

TABLE VI-2. Training Input, Output, and Load
Undergraduate Pilot Training

Service Component	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Army								
Active	438	349	2,064	1,895	451	2,369	2,230	525
Reserve	5	1	0	0	0	33	31	6
Natl Guard	99	99	471	440	106	441	436	103
Navy								
Active	806	922	879	635	923	849	714	1,017
Reserve	0	0	0	0	0	0	0	0
Marine Corps								
Active	450	431	464	390	484	464	390	484
Reserve	0	0	0	0	0	0	0	0
Air Force								
Active	699	683	1,247	900	1,006	1,334	1,025	1,106
Reserve	34	38	51	46	45	66	47	53
Natl Guard	84	113	102	83	141	175	87	209
DoD								
Active	2,393	2,385	4,654	3,820	2,864	5,016	4,359	3,132
Res/Gd Tot	222	251	624	569	292	715	601	371
Total	**2,615**	**2,636**	**5,278**	**4,389**	**3,156**	**5,731**	**4,960**	**3,503**

Load data for each Service for undergraduate helicopter pilot training are shown in Table VI-3.

TABLE VI-3. Training Input, Output, and Load
Undergraduate Helicopter Pilot Training

Service Component	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Army								
Active	438	349	2,064	1,895	451	2,369	2,230	525
Reserve	5	1	0	0	0	33	31	6
Natl Guard	99	99	471	440	106	441	436	103
Navy								
Active	226	321	309	250	311	309	260	319
Reserve	0	0	0	0	0	0	0	0
Marine Corps								
Active	224	221	216	176	222	216	176	222
Reserve	0	0	0	0	0	0	0	0
Air Force								
Active	32	28	50	50	33	50	50	33
Reserve	0	0	1	0	0	4	1	2
Natl Guard	1	1	2	2	1	2	2	1
DoD								
Active	920	919	2,639	2,371	1,017	2,944	2,716	1,099
Res/Gd Tot	105	101	474	442	107	480	470	112
Total	**1,025**	**1,020**	**3,113**	**2,813**	**1,124**	**3,424**	**3,186**	**1,211**

The following table shows FY 1999 programmed course length and projected attrition rates for the Army undergraduate helicopter pilot training program.

TABLE VI-4. Course Length and Attrition Rates, Army
Undergraduate Helicopter Pilot Training*

	Commissioned Officer Candidates	Warrant Officer Candidates
Course Length (Weeks)	40	42.3
Attrition Rate	1.2%	9.7%

*UHPT consists of dual track training in either the UH-1H or the OH-58 A/C

Navy Undergraduate Pilot Training begins with a common core of basic ground training and primary flight training and then diverges according to whether the student is to be qualified in jet aircraft, propeller aircraft or helicopters. The basic ground phase, or aviation pre-flight indoctrination, is six weeks in length for officer students and 14 weeks for aviation officer candidates. This phase also serves as an officer training period for the latter group.

The following table shows FY 1998 course length in weeks, attrition rates, and type of aircraft used for training for each phase of the syllabus.

TABLE VI-5. Course Phasing, Navy/Marine Corps Undergraduate Pilot Training

Course/Phase	Course Length (weeks)	Attrition Rate Navy	Attrition Rate USMC	Type Aircraft
Commisioned Officer				
Aviation Pre-Flight Indoctrination	6.0	3.0%	3.0%	None
Primary Flight Training (Jet, Prop, Helo)	22.0	9.0%	9.0%	T-34C
Strike Training (Jet)				
Intermediate	22.8	5.0%	5.0%	T-2C
TA4J Advanced	24.8	5.0%	5.0%	TA-4J
T45 Advanced	24.4	5.0%	5.0%	T45A
T 45TS Advanced	40.0	8.0%	8.0%	T45A
Maritime Training (Prop)				
Intermediate	5.2	1.0%	1.0%	T-34C
Advanced	20.2	2.0%	2.0%	T-44A
USAF Adv Multi-Engine	25.0	N/A	N/A	T-44A
E-2/C-2 Training (Carrier Based Multi-Engine)				
Intermediate	13.4	2.0%	N/A	T-44A
Advanced	22.6	12.0%	N/A	T-2C
Rotary Helicopter Training				
Intermediate	5.2	1.0%	1.0%	T-34C
Advanced	21.4	3.5%	3.5%	T4-57C

Because of the task requirements which dictate variations in course content, the standard Undergraduate Pilot Training course is as short as 55 weeks for an officer student qualifying in helicopters or as long as 82 weeks for an aviation officer

candidate qualifying in jets. Actual course duration may be longer because of unforeseen circumstances such as major aircraft groundings, fuel shortages or inclement weather.

The following table displays load data for Navy and Marine Corps Undergraduate Pilot Training. All participants are in the active force.

TABLE VI-6. Training Input, Output, and Load
Navy/Marine Corps Undergraduate Jet Pilot Training

	FY96	FY97		FY98			FY99	
Service	Load	Load	Input	Output	Load	Input	Output	Load
NAVY								
Jet	355	360	287	164	332	257	215	400
Prop	225	241	283	221	280	283	239	298
Helo	226	321	309	250	311	309	260	319
Total	**806**	**922**	**879**	**635**	**923**	**849**	**714**	**1,017**
Marine Corps								
Jet	192	176	216	186	228	216	186	228
Prop	34	34	32	28	34	32	28	34
Helo	224	221	216	176	222	216	176	222
Total	**450**	**431**	**464**	**390**	**484**	**464**	**390**	**484**

The final program of Undergraduate Pilot Training is training of Air Force fixed-wing jet pilots. Air Force helicopter pilots are trained in the Army program. The majority of Air Force fixed-wing pilots are trained in the all-jet USAF Undergraduate Pilot Training program. The standard course length is 51 weeks. Forecast attrition for FY 1998 and FY 1999 is 15 percent, not including flight screening programs.

In addition, approximately 111 Air Force pilots will be trained annually in the EURO-NATO Joint Jet Pilot Training (ENJJPT) program at Sheppard Air Force Base, Texas. Forecast attrition for the program is 12 percent and the course length is 55 weeks. ENJJPT is a cooperative undergraduate pilot and pilot instructor training program that began operation on 1 October 1981 and is scheduled to end in 2005. Nations involved in the program are Belgium, Canada, Denmark, Germany, Greece, Italy, Netherlands, Norway, Portugal, Turkey, the United Kingdom and the United States. ENJJPT is based on the principles of proportionate sharing of program costs and proportionate instructor pilot manning. Alternative scenarios to succeed ENJJPT are being reviewed

for future NATO Flight Training which include flexible syllabi, upgraded and/or new trainer aircraft, increased simulation, and concurrent programs in the U.S. and Canada.

Load data for both standard Air Force pilot training and ENJJPT are shown in Table VI-7.

TABLE VI-7. Training Input, Output, and Load
Air Force Undergraduate Jet Pilot Training

Service Component	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Active	667	655	1,197	850	973	1,284	975	1,073
Reserve	34	38	50	46	45	62	46	51
Natl Guard	83	112	100	81	140	173	85	208
Total	**784**	**805**	**1,347**	**977**	**1,158**	**1,519**	**1,106**	**1,332**

At the conclusion of Undergraduate Pilot Training, the new pilot is qualified in trainer aircraft but requires additional training in operational aircraft units and employment tactics.

Specialized Undergraduate Pilot Training (SUPT)

USAF Air Education and Training Command is in transition from generalized Undergraduate Pilot Training (UPT) to Specialized Undergraduate Pilot Training (SUPT). The course is similar and equal in duration to UPT except students split into tracks at the completion of the T-37 phase (Phase II.) Students in the Bomber - Fighter Track fly the T-38 in Phase III. Students in the Airlift - Tanker Track fly the T-1A in Phase III. Finally, students going to helicopters enter Undergraduate Helicopter Training with the Army during Phase III. Reese Air Force Base (AFB) converted to SUPT for FY 94 classes.

Undergraduate Navigator Training

The Navy trains Navy and Marine Corps personnel to become Naval Flight Officers. The Air Force trains its personnel as navigators. The duties of Naval Flight Officers and Air Force navigators are not precisely the same because of mission differences, but at the undergraduate level they are sufficiently similar that they are referred to collectively in this report as "navigators" (the Army does not train or use navigators).

The Undergraduate Naval Flight Officer (UNFO) training program is a building block training program. Training commences at NAS Pensacola with Aviation Pre-flight Indoctrination (six weeks) during which the student learns the aeronautical and physiological aspects of flight. After completing this phase of the training, the student

enters Basic Naval Flight Officer (NFO) training also located at NAS Pensacola. This 14-week course encompasses basic Navigation/Communications training developed in the 1D-23 Computerized NAV/COM training device and 2B37 (T-34C) Simulator. During this phase of training the NFO is taught basic flight skills and knowledge needed to safely navigate, communicate and manage the (T-34C) aircraft systems. Successful completion of Basic NFO training qualifies student for entrance into either the Joint Undergraduate Navigation Training (JUNT) (22 weeks) conducted at Randolph AFB, Texas (described in a later paragraph), or the Navy Intermediate NFO training held at NAS Pensacola. The Intermediate NFO Phase of training (14 weeks) is divided into to levels of training both of which expand the knowledge gained in Basic NFO phase training and requires higher skill and performance standards. The student receives additional 1D-23 NAV/COM, 2B37 (T-34D) Simulator, and T-34C flight training in the first level of Intermediate training. In the second level of training the student advances to the multi place (T-1A Jayhawk) aircraft for jet instrument and visual navigation. After successful attainment of the performance standards, the student proceeds to one of the following advanced specialized Naval Flight Officer Training phases: Strike Fighter (F-14D/F-18E/F) (28 weeks), Strike (ES-3/S-3B/EA-6B) (21 Weeks), or Airborne Tactical Data Systems (E-2C) (15 weeks of training held at VAW-110 NAS, Norfolk). Students who advance to Strike/Strike Fighter training receive Ground Mapping & Air Intercept simulator training respectively. Both receive advanced flight training in the (T-39N Sabreliner) multi-place aircraft where they perfect the necessary radar skills required by fleet NFOs. Additionally, the students train in the 2F101 T-2 Simulator and T-2C aircraft for jet acclimatization and high speed navigation.

The advanced segment of training for Naval Flight Officers destined for the multi-engine land base community (EP-3/P-3/E-6A) is now managed by the 562 FTS at Randolph AFB. Navigator candidates receive 333 hours of academic instruction, 84 hours of simulator training, and 73 hours of flight instruction in the T-43 aircraft during 22 weeks of training. This training provides sufficient skills and knowledge so that further training for the newly rated navigator can be limited to flight training in operational aircraft and training in employment of applicable weapons systems.

The Air Force program consists of a 22-week core course that includes 266 hours of academic instruction, 35 hours of flight simulator training, 27 hours of actual flight instruction in the T-43 aircraft, and 7.8 hours in the T-37 aircraft. After the core course, students attend either the Navigator Track Course (NAV); or T-37 Top-Off, an 8-week, 15.6 flying hour course to prep students for joining the intermediate program at Pensacola. The NAV Track trainee receives 300 academic hours, 68 simulator hours, and 88 T-43 hours.

The Air Force portion of the Interservice Navigator Training Program consists of a 24-week course that includes 298 hours of academic instruction; 80 hours of flight simulator training; 73 hours of actual flight instruction in the T-43 Aircraft; and for Air Force navigators, an additional eight week low level course including 6 hours in the T-1. Students will be awarded wings upon completion of these two courses. The Air

Force also has a 28 week course specifically for the USMC which consists of 70 hours of flight training in the T-43.

After graduation, navigators require additional training in operational aircraft and employment techniques. Training load data for Undergraduate Navigator Training are displayed in Table VI-8.

TABLE VI-8. Training Input, Output, and Load
Undergraduate Navigator Training

Service Component	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Navy								
Active	300	349	462	360	418	462	356	415
Marine Corps								
Active	3	6	20	20	15	20	20	15
Air Force								
Active	0	0	0	0	0	0	0	0
Reserve	10	15	44	36	45	51	45	47
Natl Guard	190	322	797	725	370	801	729	372
DoD								
Active	303	355	482	380	433	482	376	430
Res/Gd Tot	200	337	841	761	415	852	774	419
Total	**503**	**692**	**1,323**	**1,141**	**848**	**1,334**	**1,150**	**849**

Other Flight Training

This category covers miscellaneous types of flight training, including flight familiarization and other flight programs which were not previously included in undergraduate pilot or navigator training. Load data are displayed in Table VI-9.

The Army includes courses for instructor pilots and specific aircraft pilot qualification courses in this category. Most of the courses are short, in the range of two to seven weeks.

The Navy Other Flight Training workload is composed mainly of instructor ground school training courses. Prospective instructors are taught unique techniques employed in the training of flight students. These courses are the Flight Instructor Training Course (FITC) and the Academic Instructor Training School (AITS). Jet transition training for designated aviators not qualified in jet aircraft is also included in this category, as are indoctrination flights for U. S. Naval Academy and NROTC

midshipmen. For this report, the Navy included Midshipmen T-34C, Midshipmen TH-57, and Aircrew Coordination Training Instructors in Table VI-9.

The Air Force conducts a separate 25-day flight screening program for all candidates of Specialized Undergraduate Pilot Training.

TABLE VI-9. Training Input, Output, and Load
Other Flight Training

Service Component	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Army								
Active	261	308	1,625	1,768	281	1,653	1,691	269
Reserve	7	11	54	62	9	56	56	6
Natl Guard	53	35	543	513	70	573	575	79
Navy								
Active	52	53	2,065	2,065	56	2,065	2,065	56
Air Force								
Active	265	185	2,497	2,264	283	2,777	2,523	306
Reserve	4	3	72	69	6	110	107	7
Natl Guard	17	11	196	179	15	303	273	27
DoD								
Active	578	546	6,187	6,097	620	6,495	6,279	631
Res/Gd Tot	81	60	865	823	100	1,042	1,011	119
Total	**659**	**606**	**7,052**	**6,920**	**720**	**7,537**	**7,290**	**750**

NOTE: Other Flight Training consists of Flight Familiarization Training, Advanced Flight Training and Other Flight Training.

The balance of the Air Force Other Flight Training workload is limited largely to instructor courses for pilots and navigators. Additionally, the Air Education and Training Command conducts some specialized courses. Included among these are Fixed Wing Qualification, Banked Pilot Requalification, and Medical Officers Training.

In each of the Services, graduates of undergraduate pilot and undergraduate navigator training receive supplementary training in the specific aircraft they will be flying on operational missions. Emphasis is placed on crew training and performance under conditions that would be encountered in combat. In the Army, most of this training is provided as part of normal unit training by the operational unit to which the new pilot is assigned. In the other Services, this additional training is provided by Navy or Marine fleet readiness squadrons, Marine combat crew readiness training squadrons, and Air

provided as part of normal unit training by the operational unit to which the new pilot is assigned. In the other Services, this additional training is provided by Navy or Marine fleet readiness squadrons, Marine combat crew readiness training squadrons, and Air Force combat crew training squadrons. As an exception, centrally conducted Army advanced flight training loads are included within Other Flight Training loads. However, most such training is classified as "crew and unit training" by the Navy, Marine Corps and Air Force and is not included in the loads of this report.

Determination of Requirements for Rated Officers

Flight Training rates are developed by comparing projections of future requirements for rated officers with projections of the future status of inventories of both Reserve and Active duty rated officers. Consideration is given to the need to have sufficient active duty aviators on hand, in appropriate grades. Requirements for rated officers include both the numbers needed to man the force in peacetime and the additional increment needed to sustain the force when war breaks out. For analytical purposes, aviator requirements are divided into two parts: unit and individuals. Requirements for aviators for each of these categories are computed to meet both peacetime needs and wartime mobilization needs.

Unit requirements represent the number of rated officers needed to carry out operational, training and management activities for programmed units. Each such authorized position (that is, military space or billet) requires a rated officer as an incumbent in order to carry out the functions of the job, either because the job involves flying duties i.e., "operational flying" positions as defined for purposes of the Aviation Career Incentive Act of 1974, or requires flying experience. Other positions that may be occupied by rated officers for career broadening or similar purposes, but that do not require rated officer incumbents for accomplishing the duties, are not included. Unit requirements have three subcomponents: force, training, and supervision.

- Force requirements are the positions required to man and operate the Services' aircraft. The number of force positions is a product of established crew ratios (the number of crews per aircraft), which take into account workload (flying hour) and readiness factors and the amount of mission flying and unit flight training that is necessary.

- Training positions include the flyers who are conducting formal flight training.

- The supervision component is made up of officer positions entailing actual supervision of flying and flight-related activities and the performance of staff jobs that require the expertise of a rated officer. These positions are continuously scrutinized by the services to assure that rated requirements are valid.

Individual requirements include the transients, students and other individuals needed to make it possible to provide for reasonable manning of positions in units.

Rated Officer Inventory Projections

Projecting rated officer inventories into the future must be based on historical experience, current judgment and an appraisal of how the officers will react to conditions in the future (for example: pay, morale, state of the civilian economy, civilian airline hiring plans and family satisfaction with service life). These estimates are projected for at least five years in the future. Comparisons of total force inventories of rated officers are then made against the computed total force requirements, and training rates for the entire five-year period are adjusted. This process is repeated each year so that adjustments can be made in training rates based on changes in requirements and/or updated inventory projections. This continuing process of adjustment is necessary to insure that the correct number of trained rated officers will be available in the future without large and expensive fluctuations in training rates.

Training Rate Adjustments

When a comparison of requirements and inventories discloses a shortage or overage of projected rated officers, training rates are adjusted upward or downward in order to bring the program back into balance. For example, if projected FY 2003 pilot requirements exceed projected inventories by 500, an increase in training rates (that is, output or production) of pilots of 100 per year starting in FY 1999 may be appropriate. Inputs into the training program would start in FY 1999 in order to obtain the first increase in desired output in FY 2000. This re-evaluation process is repeated at least once each year, with adjustments made as necessary to avoid wide fluctuations in loads.

Determination of Training Loads

The process described above, through continuous updating of the comparison between projected rated officer requirements and inventories, leads to a requirement for phased output from the flight training establishment. The desired annual output, considering the anticipated attrition rates and the planned course lengths, as discussed in the preceding sections on the various types of flight training, establishes the size of the input necessary to achieve the target output. Training loads are then calculated using these factors to determine the average number of students to be on hand during the training year. For FY 1998 and FY 1999, the currently recommended loads are those displayed previously in this chapter.

VII

PROFESSIONAL DEVELOPMENT EDUCATION

General Description

The purpose of Professional Development Education is to provide training and education to career military personnel to prepare them to perform increasingly complex responsibilities as they progress in their military careers. Where Specialized Skill Training is directed toward specific job skills, Professional Development Education is concerned with broader professional development goals in such subjects as leadership and management, military science, engineering and medicine. Professional Development Education is conducted at both military and civilian institutions. This category includes senior enlisted leadership training in recognition of the broad professional content of these courses, as opposed to the narrower skill-oriented training typical of most enlisted training programs. Most of the programs in this category are for officer professional development.

Education in the military is fundamental to the development of military officers, enabling them to become fully qualified to perform duties of high responsibility in both war and peace. In most non-military professions, growth in ability and knowledge is gained through experience. In the military, opportunities for full practice of the profession are limited to wartime, and even those officers with combat experience have not had the opportunity for thorough exercise of warfare decision skills at their current rank and responsibility. The military school system serves partially to fill this shortfall by educating military officers in the skills and knowledge needed to perform their duties in a variety of locales and situations, both in peacetime and wartime.

Training loads for FY 1993 through FY 1999 are as shown in Table VII-1. The total loads in the table show a considerable disparity among the Services in amounts of Professional Development Education. These disparities are more apparent than real, and are related mainly to somewhat different ways of categorizing Service education and training programs.

The first three subcategories of Professional Development Education are officer professional military development programs. These programs are at three levels: career, intermediate and senior. In addition to regular courses for Active Force officers, most schools in this category present non-resident courses and short seminars. Large numbers of Reserve Component officers and other military students are provided instruction through correspondence courses.

TABLE VII-1. Professional Development Education Training Loads

Service Component	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Army							
Active	2,419	3,188	3,258	2,329	2,402	2,573	2,755
Reserve	50	66	70	61	59	59	57
Natl Guard	56	72	79	69	69	65	70
Navy							
Active	2,240	2,200	2,147	1,981	1,934	1,713	1,907
Reserve	21	24	27	22	22	21	18
Marine Corps							
Active	1,468	1,516	1,250	1,182	1,590	1,633	1,712
Reserve	69	86	26	20	64	55	57
Air Force							
Active	7,490	4,853	4,254	4,038	4,201	4,437	4,403
Reserve	163	97	156	164	195	242	242
Natl Guard	286	194	156	177	203	183	182
Total							
Active	13,617	11,757	10,909	9,530	10,127	10,356	10,777
Res/Gd	645	539	514	513	612	625	626
Total	**14,262**	**12,296**	**11,423**	**10,043**	**10,739**	**10,981**	**11,403**

Professional Military Education (PME) is the systematic and comprehensive process of developing the skills, knowledge, and military judgment required to deal with the increasingly complex responsibilities associated with the duties and responsibilities of higher grades. In contrast to specific job or billet-related skills, PME is the life-long study of the profession of arms within the framework of military operations. PME is acquired through structured self-study, professional reading, symposia, formal schools attendance and experiences gained in duty assignments. The purpose of PME is to assist all Service members in fulfilling their personal goals and responsibilities for achieving operational competence.

Career Officer Professional Schools

The Marine Corps and Air Force conduct career officer professional courses for officers with some experience in operational units. These courses are Service-

wide in scope and are, therefore, carried in this report under Professional Development Education. The Army and Navy conduct courses that are on a similar level, but are oriented toward specific skills, e.g., the Navy's Surface Warfare Officer's Course, or somewhat broader skills within a specific part of the Service, e.g., the Army's Armor Officer Advanced Course. The Army and Navy courses, because of their specialization, are treated in this report as part of Specialized Skill Training.

The Marine Corps Amphibious Warfare School prepares captains for duties in battalion or squadron command or on regimental level staffs. The course length is 40 weeks. The Air Force Squadron Officer School is an 7-week primary level course designed for captains to improve their professional competence and inspire their dedication to the profession of arms.

The training load data associated with these Marine and Air Force courses are displayed in Table VII-2.

TABLE VII-2. Training Input, Output, and Load
Career Officer Professional Schools

Service	FY96	FY97	FY98			FY99		
Component	Load	Load	Input	Output	Load	Input	Output	Load
Marine Corps								
Active	134	134	176	176	135	175	175	134
Reserve	6	9	218	218	12	214	214	9
Air Force								
Active	430	356	2,203	2,203	286	2,203	2,203	286
Reserve	20	15	130	130	17	130	130	17
Natl Guard	21	17	164	164	21	164	164	21
DoD								
Active	564	490	2,379	2,379	421	2,378	2,378	420
Res/Gd Tot	47	41	512	512	50	508	508	47
Total	**611**	**531**	**2,891**	**2,891**	**471**	**2,886**	**2,886**	**467**

Intermediate Service Schools

Each of the Services maintains a Command and Staff College. While there are differences in approach and curriculum based on the requirements of the parent Service, each of the courses is designed to prepare officers for command and staff duties in all echelons of their parent Services and in joint or allied

of the Command and Staff Colleges of the other Services and a few attend Allied schools at the same level. Attendance at the Intermediate Service Schools is on a select basis. The following table lists the Command and Staff Colleges and their respective course length in weeks.

TABLE VII-3. Intermediate Service Schools

Schools	Location	Course Length (weeks)
Army Command And General Staff College	Fort Leavenworth, KS	40
College of Naval Command and Staff	Newport, RI	44
Marine Corps Command and Staff College	Quantico, VA	33
Air Command and Staff College	Montgomery, AL	43

Load data for military personnel attending Intermediate Service Schools is shown in the following table.

TABLE VII-4. Training Input, Output, and Load
Intermediate Service Schools

Service	FY96	FY97	FY98			FY99		
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	746	706	863	869	704	874	871	715
Reserve	14	14	35	34	15	33	35	15
Natl Guard	14	16	34	34	16	34	34	16
Navy								
Active	235	220	1,338	1,356	194	1,338	1,342	192
Reserve	8	6	4	6	5	4	4	4
Marine Corps								
Active	141	156	432	432	150	527	527	161
Reserve	0	11	440	440	20	174	174	9
Air Force								
Active	413	400	737	738	404	737	737	403
Reserve	10	10	12	12	10	12	12	10
Natl Guard	9	11	13	13	11	13	13	11
DoD								
Active	1,535	1,482	3,370	3,395	1,452	3,476	3,477	1,471
Res/Gd Tot	55	68	538	539	77	270	272	65
Total	**1,590**	**1,550**	**3,908**	**3,934**	**1,529**	**3,746**	**3,749**	**1,536**

Senior Service Colleges

Each of the services maintains a Senior Service School or "War College." In addition, there is the National Defense University, consisting of two joint Senior Service Schools, The National War College and the Industrial College of the Armed Forces. Students from all four Services attend these colleges. Senior Service College attendance is highly selective and students are chosen by Service selection boards from among the most promising officers in the lieutenant colonel/colonel, commander/captain grades.

The common purpose of these Senior Service Colleges is to prepare students for senior command and staff positions at the highest levels in the national security establishment and the allied command structure. The unifying focus is the study of national goals and national security policy. Each of the Service

colleges, while concentrating on the employment of the parent Service in the defense mission, also includes the study of the employment of the forces of other Services.

All of the colleges integrate the study of the economic, scientific, political, sociological and other factors into the consideration of national security issues. The Industrial College of the Armed Forces, in its approach to national security issues, emphasizes the use and management of national resources. The length of the principal courses at the Senior Service College is 10 months. Most colleges also conduct shorter special-purpose seminar-type courses, some particularly designed for Reserve Component officers. Use of these short courses is greatest in the Navy.

Load data for the Senior Service Colleges are shown in the following table.

TABLE VII-5. Training Input, Output, and Load
Senior Service Colleges

Service	FY96	FY97	FY98			FY99		
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	307	277	905	898	277	909	905	288
Reserve	23	25	272	275	24	287	285	26
Natl Guard	31	30	290	292	30	329	329	34
Navy								
Active	114	113	105	107	86	105	105	94
Reserve	7	9	7	9	9	7	7	7
Marine Corps								
Active	31	70	136	136	71	138	138	72
Reserve	5	6	148	148	6	96	96	4
Air Force								
Active	232	230	273	273	231	273	273	231
Reserve	7	9	31	31	9	31	31	9
Natl Guard	7	12	38	38	16	38	38	15
DoD								
Active	684	690	1,419	1,414	665	1,425	1,421	685
Res/Gd Tot	80	91	786	793	94	788	786	95
Total	**764**	**781**	**2,205**	**2,207**	**759**	**2,213**	**2,207**	**780**

Enlisted Leadership Training

Courses included in this category are designed to provide selected senior enlisted personnel the skills and knowledge needed to assume the responsibilities of the highest non-commissioned officer grades. These courses are the culmination of formal enlisted training and are, for enlisted personnel, analogous to the officer courses discussed in the preceding sections. In addition to such subjects as methods of leadership, human relations, discipline and training, and the administration and employment of military organizations, these higher level schools provide senior non-commissioned officers a broader perspective of the role and functions of their Services. Schools, locations and course length in weeks are shown in Table VII-6.

TABLE VII-6. Enlisted Leadership Training Courses

Schools	Location	Length (wks)
Army: Sergeants Major Academy	Fort Bliss, TX	40
Advanced NCO (ANCOC)	TRADOC-wide	4 to 20
Basic NCO (BNCOC)	TRADOC-wide	6 to 19
Primary Leadership Dev Crs (PLDC)	Army-wide	4
Navy: Senior Enlisted Academy	Newport,RI	9
Marine Corps: Senior Level	Quantico, VA	1
Staff NCO Academy (Career Course)	Quantico, VA	7
	Camp Lejeune, NC	7
	Okinawa, JA	7
	El Toro, CA	7
Staff NCO Academy (Advanced Course)	El Toro, CA	8
	Camp Lejeune, NC	8
	Quantico, VA	8
Sergeant Course	Quantico, VA	5
	Camp Lejeune, NC	5
	Okinawa, JA	5
	El Toro, CA	5
	Twentynine Palms, CA	5
	Hawaii	5
Air Force:		
AF Senior NCO Academy	Gunter Annex, AL	7
NCO Academies	15 Worldwide	8
AF Airman Leadership School	69 Worldwide	4

Other enlisted leadership training for more junior noncommissioned officers is carried in Specialized Skill Training (except for the Air Force). This includes command sponsored NCO academies, for example. This training tends to be

more skill related for specific types of specialized leadership responsibilities. The senior enlisted leadership training carried in this chapter is more properly thought of as Professional Development Education in a broader sense. All enlisted Air Force PME is not skill related, but focuses on leadership, followership, management and supervisory roles throughout the member's career. All four Military Services now sponsor Senior Enlisted Leadership Academies. In addition the Air National Guard conducts Professional Military Education courses at McGhee-Tyson Air Base, Knoxville, TN. These courses include Leadership School, NCO Academy, Academy of Military Science and Professional Continuing Education. Army National Guard NCOs and Army Reserve NCOs are trained in the Reserve Component Noncommissioned Officers Education System (RCNCOES), attending courses at the appropriate level of training at Reserve Component Training Institutions. However, the training loads for RC institutions are not included within this report.

Training loads for enlisted leadership training are shown in Table VII-7.

TABLE VII-7. Training Input, Output, and Load
Enlisted Leadership Training

Service	FY96	FY97	FY98			FY99		
Component	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	200	261	485	298	301	600	467	410
Reserve	21	20	31	22	20	10	30	16
Natl Guard	23	23	25	23	19	29	24	20
Navy								
Active	43	42	250	250	43	250	250	43
Reserve	4	4	20	20	4	20	20	4
Marine Corps								
Active	663	931	7,906	7,550	940	8,050	7,716	958
Reserve	9	38	584	584	17	954	953	35
Air Force								
Active	1,765	1,922	22,344	22,188	2,193	22,324	22,320	2,189
Reserve	41	86	850	849	87	850	847	87
Natl Guard	120	147	1,083	1,088	112	1,083	1,078	112
DoD								
Active	2,671	3,156	30,985	30,286	3,477	31,224	30,753	3,600
Res/Gd Tot	218	318	2,593	2,586	259	2,946	2,952	274
Total	**2,889**	**3,474**	**33,578**	**32,872**	**3,736**	**34,170**	**33,705**	**3,874**

Graduate Education Fully Funded, Full Time

The Department of Defense needs military officers with specialized advanced knowledge which, in some cases, is attainable only through graduate education. Under the program established by Section 2004 of Title 10 United States Code and described in this section, military officers pursue graduate education on a fully funded, full-time basis. A minimum service payback obligation of three years for the first year of schooling and one year for each year after the first is required of all officers entering the program. Services establish maximum pay back periods.

The following table displays training loads data for these graduate education programs. All participants are members of the Active Forces.

TABLE VII-8. Training Input, Output, and Load
Graduate Education, Fully Funded, Full Time

	FY96	FY97	FY98			FY99		
	Load	Load	Input	Output	Load	Input	Output	Load
Service								
Army	773	853	587	527	979	587	582	1,027
Navy	1,085	1,017	414	534	944	485	580	1,045
Marine Corps	156	175	113	81	194	113	108	221
Air Force	783	768	546	537	793	563	468	793
Total	2,797	2,813	1,660	1,679	2,910	1,748	1,738	3,086

Officer graduate students attend either a civilian educational institution or one of the two Service institutions, the Naval Postgraduate School or the Air Force Institute of Technology, depending upon where the required education can best be obtained. Curricula in the two Service institutions emphasize military unique courses, such as in logistics management or intelligence operations, and military applications in all other courses. While these schools are primarily used by the parent Services (including Marine Corps use of the Naval Postgraduate School), they also educate some students from other Services. The following table displays student loads for these two schools.

TABLE VII-9. Graduate Education Load at Service Institutions				
	Actuals		Estimates	
	FY96	FY97	FY98	FY99
Naval Postgraduate School				
Army	129	121	117	126
Navy	928	857	777	880
Marine Corps	131	153	172	154
Air Force	28	28	29	29
Total	**1,216**	**1,159**	**1,095**	**1,189**
Air Force Institute of Technology				
Army	0	0	0	0
Navy	0	0	0	0
Marine Corps	2	4	4	4
Air Force	434	444	426	347
Total	**436**	**448**	**430**	**351**

Requirements for graduate-degreed officers depend upon the number of "validated billets," that is, military positions that have been determined to require an incumbent with graduate level education in the applicable academic discipline. The Services examine the duty prerequisites for each billet nominated for validation and determine if the job does, in fact, require an officer with an advanced degree. Requirements for graduate legal education are determined separately.

Other Full Time Education Programs

In addition to the Professional Development Education programs already described there are a variety of other full-time programs tailored to meet the particular needs of the Services. (Health Professions Education programs are briefly discussed in a separate section at the end of this chapter).

Several programs have been designed to permit selected individuals an opportunity to work toward associate, baccalaureate or advanced degrees. These programs benefit the Services in several important ways: they increase the technical qualifications of the individuals in the program; they improve the general educational levels of Service personnel; and they provide career retention and recruiting incentives to outstanding personnel. In addition, to the extent possible, personnel in advanced education programs are later used to satisfy validated requirements and hence reduce the required student load in graduate education for validated billets.

The degree completion programs are managed by the individual Military Departments and each has its own selection criteria. Generally, individuals are

not selected for a program unless the education will enhance their professional development and be of use to the Military Department. All of the programs require an active service obligation payback from the individual.

Short course education provides the Military Services with needed skills in a wide variety of scientific, administrative and other fields. These programs are selected to train personnel in job-oriented skills that can best be acquired through abbreviated courses. Accounting, traffic management and aviation safety are examples of skills involved. Some of this training is conducted in DoD schools, some at civilian institutions.

TABLE VII-10. Training Input, Output and Load
Other Full Time Education Programs

Service Component	FY96 Load	FY97 Load	FY98 Input	FY98 Output	FY98 Load	FY99 Input	FY99 Output	FY99 Load
Army								
Active	303	305	735	731	312	735	735	315
Navy								
Active	138	144	3,017	3,017	160	2,975	2,975	156
Reserve	3	3	275	275	3	275	275	3
Marine Corps								
Active	57	124	103	73	143	103	101	166
Air Force								
Active	435	537	7,793	7,780	559	7,684	7,684	530
Reserve	24	21	1,220	1,220	49	1,220	1,220	49
Natl Guard	20	16	566	566	23	566	566	23
DoD								
Active	933	1,110	11,648	11,601	1,174	11,497	11,495	1,167
Res/Gd Tot	47	40	2,061	2,061	75	2,061	2,061	75
Total	**980**	**1,150**	**13,709**	**13,662**	**1,249**	**13,558**	**13,556**	**1,242**

Health Professions Education

This subcategory is made up of a wide variety of courses for personnel of all health professions; physicians, dentists, nurses, medical administrators, and so forth. The majority of the courses offered are conducted in military facilities and vary in length from a few days to a full year. Some training is conducted at civilian medical institutions and, in the case of the Army, includes some advanced degree programs. The purpose of Health Professions Education is to expand the skills of military medical personnel and to provide them timely

information on the latest techniques in their fields. In this category, the Army and Navy provide long-term training. The Air Force relies on short courses. Educational programs connected with the acquisition of health professionals is carried in this report under Officer Acquisition Training. The following table shows load data for Health Professions Education Programs.

TABLE VII-11. Training Input, Output and Load
Health Profession Education

	FY96	FY97		FY98			FY99	
	Load	Load	Input	Output	Load	Input	Output	Load
Service								
Army	519	1,588	841	702	1,713	733	733	1,780
Navy	366	398	357	300	286	353	278	377
Air Force	42	42	1,940	1,940	41	1,940	1,940	41
Total	**927**	**2,028**	**3,138**	**2,942**	**2,040**	**3,026**	**2,951**	**2,198**

TRAINING MANPOWER

General Description

Manpower associated with the individual training mission in the Department of Defense can be divided into two parts: (1) trainees and students being trained, and (2) military and civilian manpower conducting and supporting the training. These two different classes of manpower are discussed and explained in this chapter.

Trainees and Students

Manpower undergoing training in the Defense training establishment is defined and quantified in three different ways, each of which serves a somewhat different purpose with regard to manpower accounting and resource allocation.

1. Training Loads. These are the "military training student loads" and were detailed by component in Chapters III through VII of this report. They represent the number of military trainees, students and cadets of each Service and component in training during a given fiscal year. Training loads include all military manpower of a given Service or component who are undergoing individual training in a centralized school or training center, regardless of whether the training is conducted by the parent Service, one of the other Services, a DoD school, or by an agency or institution outside the Department of Defense, such as a civilian college or university. Training loads also include all military personnel in training regardless of their assignment status. Some trainees and students are assigned in a Permanent Change of Station (PCS) status to the training activity. Others are attending training in a temporary duty (TDY) or temporary additional duty (TAD) status while remaining assigned to their parent units. Still others are attending training while in transit from one permanent assignment to another.

   Since most courses are much shorter than a year in length, the actual number of students and trainees who enter training, and the number who graduate, is considerably greater than the training load. For example, the total programmed training load for Recruit Training in FY 1998 is 35,782 yet about 217,000 persons will enter Recruit Training and about 197,000 will graduate.

2. Training Workloads. The total number of trainees and students undergoing training within DoD includes some trainees and students of foreign nations, DoD civilian employees, and members of other departments and agencies of the U.S. Government, notably the Coast Guard. In addition, many U.S. military students and trainees are trained by a Service other than their own. Consequently, the cumulative number of students trained (or to be trained) by a given Service, or its

training workload, usually differs from its training load. For example, the Marine Corps has a programmed Flight Training load of 524 in FY 1998. However, since the training is conducted by other Services, its Flight Training workload is zero. On the other hand, because the Navy trains many personnel from other Services and Coast Guard, foreign students as well as most of its own students, the Navy's Specialized Skill Training workload is higher than its training load.

Training workload, in conjunction with other applicable considerations, is the major determinant of the resources (manpower, funds, material and facilities) required to conduct training. It, rather than training load, is appropriately used in considering the allocation of resources to a Service or a training activity. Table VIII-1 displays the programmed military training workloads for each of the Services in FY 1998 and 1999.

TABLE VIII-1. Training Workloads
(Thousands)

FY98	Army	Navy	Marine Corps	Air Force
Category				
Recruit	13.2	9.3	7.7	4.2
Officer Acquisition	4.9	4.7	0.4	6.9
Specialized Skill	40.5	24.0	8.6	18.2
Flight	1.1	2.5	0.0	1.9
Prof. Dev. Educ.	1.9	2.2	1.3	5.3
OSUT	9.4	N/A	N/A	N/A
Total	**71.0**	**42.7**	**18.0**	**36.4**
FY99				
Recruit	15.8	8.1	7.9	4.2
Officer Acquisition	4.8	4.7	0.4	6.9
Specialized Skill	41.5	22.0	8.4	17.3
Flight	1.1	2.7	0.0	2.1
Prof. Dev. Educ.	2.1	2.3	1.3	5.2
OSUT	10.2	N/A	N/A	N/A
Total	**75.6**	**39.8**	**18.1**	**35.8**

3. Students, Trainees, and Cadets. In the Individuals accounts of the Defense Manpower Requirements Report, military manpower is included for each Service as "Trainees and Students" and (except for the Marine Corps) "Cadets". Conceptually, this manpower represents the number of military trainees, students, cadets and midshipmen programmed to be assigned (PCS as opposed to TDY/TAD) for training on the last day of a given fiscal year. Student, trainee and cadet manpower is similar to training load in that both represent military members of the reporting Service in training status. Nevertheless, there are substantial differences in the way the amount of manpower in these two manpower aggregations is calculated, with

the result that the totals are seldom the same. The major reasons for these differences are:

- Training loads are man-years in training status, whereas trainees, students, and cadets are end strengths, or numbers in training on the last day of the fiscal year. Trainee, student, and cadet numbers are thus affected by the seasonality of enlistment patterns, as described in Chapter III, while the element of seasonality is leveled out in training loads.

- Training loads include students attending training in a temporary duty (TDY or TAD) status as well as those attending en route training in a PCS status. In the Defense Manpower Requirements Report, TDY and TAD students are carried in the categories of their parent units.

Training loads are a more accurate measure of the amount of training that is needed to meet military requirements than are the categorizations trainees, students and cadets.

Manpower in Support of Training

Military and civilian manpower is required to accomplish the individual training mission. This manpower performs all the other tasks necessary to conduct and support individual training conducted in training institutions, i.e., it conducts and supports instruction, operates training bases and facilities, maintains training equipment, produces training aids, provides personal and community services to students, trainees, and other military members, plans and manages training.

ROTC students are not military members in an active duty status and are not included in military manpower training loads. However, ROTC Basic Camp loads are included in the Army Recruit training loads because recruit training instructors and staff support and conduct that training. To be consistent with this treatment of ROTC students, manpower supporting the primary ROTC programs at colleges and universities is not included in Tables VIII-2 through VIII-5.

The following tables summarize manpower in support of training in three general functions: Conduct of Individual Training, Training Base Operating Support, and Management Headquarters. Conduct of Individual Training includes the following types of manpower: instructors, instructional support, school/training center staffs, student supervisors and direct training support such as training aids and literature, audiovisual resources and instructional systems development.

TABLE VIII-2. DoD Manpower in Support of Training, Conduct of Individual Training
(End Strength, Thousands)

	FY95		FY96		FY97		FY98		FY99	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Army	24.0	5.8	22.0	5.9	21.3	5.5	21.2	5.5	21.2	5.6
Navy	18.1	2.8	21.5	2.8	18.0	2.8	16.7	2.8	17.5	2.9
Marine Corps	8.7	0.2	7.3	0.2	9.1	0.2	9.7	0.2	8.6	0.2
Air Force	11.5	3.7	13.4	4.1	10.9	4.3	10.8	4.3	10.6	4.2
Total	**62.3**	**12.6**	**64.2**	**13.0**	**59.3**	**12.8**	**58.3**	**12.8**	**57.8**	**12.9**

TABLE VIII-3. DoD Manpower in Support of Training, Base Operating Support
(End Strength, Thousands)

	FY95		FY96		FY97		FY98		FY99	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Army	9.1	14.3	8.2	12.1	8.1	11.0	8.2	10.7	7.4	10.2
Navy	3.8	5.4	3.7	5.1	3.4	5.0	2.4	4.6	2.2	4.0
Marine Corps	2.9	1.5	3.1	1.2	2.7	1.3	2.7	1.3	3.4	1.2
Air Force	6.7	5.7	6.4	5.5	5.8	5.2	5.8	4.9	5.8	4.4
Total	**22.4**	**27.0**	**21.4**	**23.9**	**20.0**	**22.4**	**19.1**	**21.4**	**18.8**	**19.8**

TABLE VIII-4. DoD Manpower in Support of Training, Management Headquarters
(End Strength, Thousands)

	FY95		FY96		FY97		FY98		FY99	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Army	0.3	0.5	0.3	0.5	0.3	0.6	0.3	0.5	0.3	0.6
Navy	0.2	0.4	0.2	0.4	0.1	0.4	0.1	0.3	0.1	0.2
Marine Corps	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Force	0.8	0.5	0.8	0.5	0.8	0.4	0.8	0.4	0.8	0.4
Total	**1.2**	**1.4**	**1.2**	**1.5**	**1.2**	**1.4**	**1.2**	**1.3**	**1.2**	**1.2**

TABLE VIII-5. DoD Manpower in Support of Training, All Functions
(End Strength, Thousands)

	FY95		FY96		FY97		FY98		FY99	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Army	33.4	20.7	30.4	18.6	29.8	17.2	29.7	16.7	28.9	16.4
Navy	22.0	8.7	25.3	8.3	21.5	7.4	19.2	7.0	19.8	6.2
Marine Corps	11.6	1.8	10.4	1.4	11.8	1.5	12.4	1.5	12.0	1.4
Air Force	19.1	9.9	20.6	10.1	17.5	9.9	17.4	9.6	17.2	9.0
Total	**86.0**	**41.1**	**86.8**	**38.4**	**80.6**	**35.9**	**78.6**	**34.8**	**77.8**	**33.0**

The Services' estimates of training attributable manpower include some staff and support manpower that do not contribute to the production of student output and loads. This manpower is reported as training resources in the Future Years Defense Program (FYDP) because they belong to organizations and units with a primary mission of training. The majority of the non-training attributable manpower is that portion of Base Operating Support (BOS) needed to support non-training tenant activities at training installations.

Table VIII-6 shows changes in total military and civilian manpower in support of training between FY 1989 and FY 1999.

TABLE VIII-6. Manpower in Support of Training, DoD Total, by General Function
(End Strength, Thousands)

	FY89			FY98			FY99			Percent Change Total Manpower	
	MIL	CIV	TOT	MIL	CIV	TOT	MIL	CIV	TOT	FY98/89	FY99/98
Conduct of Individual Training	80	15	94	58	13	71	58	13	71	-24.3%	-0.5%
Operating Support	34	29	63	19	21	41	19	20	39	-35.2%	-4.8%
Training Headquarters	2	1	3	1	1	3	1	1	2	-9.3%	-4.1%
Total	**115**	**45**	**159**	**79**	**36**	**114**	**78**	**34**	**112**	**-28.3%**	**-2.1%**

As Table VIII-6 shows, the total military and civilian manpower in support of active training institutions has decreased 28 percent between FY 1989 and FY 1998 and 2 percent from FY 1998 to FY 1999.

As shown in Tables VIII-7 and VIII-8, training workloads will be 24 percent lower in FY 1998 than in FY 1989 and 0.6 percent lower in FY 1999 than in FY 1998.

TABLE VIII-7. Training Workload Trends
(Thousands)

	FY89	FY98	FY99	Percent Change FY98/89	FY99/98
Army	100.4	71.0	75.6	-29.3%	6.4%
Navy	70.8	42.7	39.8	-39.7%	-6.9%
Marine Corps	17.1	18.0	18.1	5.5%	0.1%
Air Force	34.2	36.4	35.8	6.4%	-1.7%
Total	**222.6**	**168.2**	**169.2**	**-24.4%**	**0.6%**

TABLE VIII-8. Training Manpower and Training Workload Trends
(Thousands)

	FY89	FY98	FY99	Percent Change FY98/89	Percent Change FY99/98
Manpower in Support of Training	159	114	112	-28.3%	-1.8%
Training Workloads	222.6	168.2	169.2	-24.4%	0.6%

Training Manpower Detailed by Service and Type of Training

Table VIII-9 shows the manpower required to support FY 1998 and FY 1999 training workloads by Service and training activity.

As was noted early in this chapter, training workloads, in conjunction with other factors, are the determinants of the resources required to conduct training. The workload/resource relationship is not a simple one, but depends upon the nature of training and training support involved. For example, Flight Training normally requires a great deal of support manpower for aircraft maintenance and weapons training requires close instructor supervision for safety considerations.

TABLE VIII-9. Training Manpower by Service and Type of Training
(Thousands)

FY98	Army		Navy		Marine Corps		Air Force		Total	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Recruit	2.3	0.1	1.0	0.0	2.7	0.0	0.3	0.0	6.3	0.1
Officer Acquisition	0.7	0.9	0.8	0.0	0.2	0.0	0.9	0.9	2.6	1.8
Specialized Skill	13.5	3.6	11.9	0.7	6.2	0.2	6.1	1.6	37.7	6.1
Flight	0.9	0.3	2.5	0.3	0.3	0.0	2.0	1.1	5.7	1.7
Professional Development	0.6	0.6	0.5	1.1	0.3	0.0	1.5	0.6	2.9	2.3
Army One-Station Unit	3.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.1
Direct Support	2.9	1.3	0.0	0.2	0.0	0.1	0.7	0.3	3.6	1.8
Base Support	5.3	9.4	2.4	4.5	2.7	1.2	5.1	4.5	15.5	19.6
Management Headquarters	0.3	0.5	0.1	0.3	0.0	0.0	0.8	0.4	1.2	1.3
Total	**29.7**	**16.7**	**19.2**	**7.0**	**12.4**	**1.5**	**17.4**	**9.6**	**78.6**	**34.8**

TABLE VIII-9. Training Manpower by Service and Type of Training
(Thousands)

FY99	Army		Navy		Marine Corps		Air Force		Total	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Recruit	2.4	0.1	1.0	0.0	2.3	0.0	0.3	0.0	6.1	0.1
Officer Acquisition	0.6	0.8	0.8	0.0	0.2	0.0	0.9	0.9	2.5	1.7
Specialized Skill	13.4	3.8	12.9	0.7	5.3	0.2	5.8	1.6	37.4	6.2
Flight	0.9	0.2	2.4	0.2	0.3	0.0	2.1	1.2	5.7	1.6
Professional Development	0.6	0.6	0.5	1.0	0.4	0.0	1.4	0.6	2.9	2.2
Army One-Station Unit	3.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.2
Direct Support	2.0	1.6	0.0	0.4	0.1	0.1	0.6	0.3	2.7	2.4
Base Support	5.4	8.5	2.2	3.6	3.3	1.1	5.2	4.1	16.1	17.4
Management Headquarters	0.3	0.6	0.1	0.2	0.0	0.0	0.8	0.4	1.2	1.2
Total	**28.9**	**16.4**	**19.8**	**6.2**	**12.0**	**1.4**	**17.2**	**9.0**	**77.8**	**33.0**

* Service estimates of training manpower include some staff and support manpower that do not contribute directly to the production of student output and loads but are reported as training resources in the Future Years Defense Program (FYDP) because they belong to larger organizations with a primary training mission.

Manpower data in the six categories of training, i.e., Recruit through One-Station Unit Training, includes instructors, school/training center staffs and student supervisors. Direct training support includes such tasks as training aids and literature, audiovisual resources, and instructional systems development.

IX

TRAINING MANAGEMENT

General Description

Chapters III through VII of this report described and explained the military training student loads required for each military component. These student loads represent patterns and levels of training effort which require manpower and other resources. The purpose of this chapter is to describe the management of individual training resources.

In considering training resources, it is important to distinguish between the training loads required by a Service but conducted in part outside the Service, and the workloads representing training conducted by the Service. As discussed in the previous chapter, the workloads, which represent training conducted by a Service, are the basis for resource requirements (manpower, material, facilities and funds) needed to conduct and support the training that the Service executes.

Management of Individual Training

Detailed management of individual training is carried out by the four Military Services. Each of the Services, except the Marine Corps, has a training commander immediately subordinate to the Service chief who is responsible for most of the individual training conducted within that Service. Some training is managed directly by the Service headquarters. However, the most prevalent pattern of control is through a training command headquarters that manages most Service military schools, training centers and other training facilities.

Staff Responsibilities

Within the Office of the Secretary of Defense (OSD), staff responsibility for individual training and education policies rests with the Under Secretary of Defense (Personnel and Readiness), with a strong influence over the allocation and use of resources being exercised by the Under Secretary of Defense (Comptroller). These two offices work closely together in the staff supervision of DoD individual training and education. The OSD role is generally one of policy formulation, allocation of resources, overview of Service training programs and coordination among the Services.

Within each Service headquarters, with exception of the Marine Corps, a principal staff officer has responsibility for individual training. Other staff members may have primary responsibility for certain types of training, for example, a Service Surgeon General for

professional medical training. Other staff members have collateral responsibilities for the allocation of manpower and funds to the training function.

Primary responsibility on the Army staff for individual training rests with the Deputy Chief of Staff for Operations and Plans and his subordinate, the Director of Training. Within the Navy, the principal staff officer is the Deputy Chief of Naval Operations for Manpower, Personnel, and Training. The Deputy Commander for Training and Education acts as the principal training advisor to the Commandant of Marine Corps, through the Commanding General, Marine Corps Combat Development Command (MCCDC). Within the Air Force, the Director of Personnel Programs, under the Deputy Chief of Staff for Personnel, has staff responsibility for individual training.

Training Commands

Each Service has a command headquarters that manages most of the individual training conducted by that Service:

- The Army's principal training command is Headquarters, Training and Doctrine Command (TRADOC), located at Fort Monroe, Virginia. TRADOC's control is exercised through training installations and school commanders throughout the United States.

- The Chief of Naval Education and Training (CNET), headquartered in Pensacola, Florida, exercises control, through subordinate functional commanders, of education and training conducted in training centers, schools, and programs throughout the Navy.

- For the Air Force, Headquarters, Air Education and Training Command at Randolph Air Force Base, Texas, directly controls individual training centers and units.

- For the Marine Corps, the Deputy Commander for Training and Education, Quantico, Virginia, also functions as the Commander, Marine Corps Schools and exercises command, operational control, technical direction, and/or coordination for all Marine Corps formal schools and training centers.

The Service-wide training commands are not responsible for all individual training and education conducted. As already noted, the Surgeons General are responsible for most health professional and medical technical training. Other examples include the Service Academies, which are under the direct supervision of the respective Service Chiefs.

The Services' training command commanders and the Marine Corps Deputy Commander for Education and Training are also the senior members of the Interservice Training Review Organization (ITRO). The ITRO was formed in 1972 to facilitate cooperative training efforts among the Services. The committees and working groups of the organization perform the detailed analysis which becomes the basis for decisions

on the feasibility of consolidation of training courses or other cooperative arrangements. A listing of major joint training efforts is provided in Appendix B.

APPENDIX A

DETERMINING TRAINING REQUIREMENTS

The following overview of the methodology for assessing and calculating training requirements is provided as a framework for understanding. As noted, details in calculation may differ to some extent among the Services and among the training categories.

Requirements

All training is accomplished to satisfy the need for personnel with certain types and levels of skills to man the approved or projected force. The Services, over the years, have developed detailed, systematic methods of determining the manpower needed to man and support the forces. The Defense Manpower Requirements Report discusses this process. From these force requirements for manpower the need for trained personnel with specific skills can then be derived. For example, a given force structure establishes the number of trained enlisted personnel needed. The number of authorized positions within that force structure for radar technicians establishes the basic requirement for trained personnel with that skill. This process is repeated periodically for all skills and skill levels for each Service, for both officer and enlisted skills. The total of all personnel in all skills needed to perform all the jobs in the force at a point in time represents the total requirement for trained manpower projected for that date.

Inventory Projections

The requirements identified through this process must be measured against the available assets, in terms of trained personnel on hand in each skill and skill level. From this asset base, estimates are made of how many trained personnel will be available at various points of time in the future. These estimates take into account probable rates of change to the current inventory -- through reenlistment, promotion, discharge, death, retirement, or other causes. These estimates are based on the best historical information available, tempered by judgment of how future personnel policies, the state of the economy, behavioral patterns, and other factors (many of them difficult to predict) will affect the probabilities that a trained individual will remain in the Service. A comparison of skill requirements and skill inventory projections, over time, establishes the extent of shortage or surplus likely to exist in each skill area by month and year. Adjusting the inventory may entail retraining personnel who are in surplus skills, but to a much greater degree, adjustment is likely to require the training of new accessions at entry level in shortage skill areas. The process places a demand on the personnel management and training establishments continually to analyze information

about attrition as it occurs, by skill and skill level, in order to produce the right number of trained personnel with the proper skills needed to maintain the balance of the skill inventory. The workload thus placed on the training establishment is detailed by graduates needed from courses of various lengths and is measured in terms of average student load, or "training load."

Average Training Loads

Resources (manpower, money, and material) needed for any particular category of training vary with the number of students undergoing training at any given time. Facilities must be constructed and maintained to accommodate these students in training. The training establishment must maintain a sufficient staff of qualified instructors to conduct instruction for the "load" of students. Students and Trainees, as described in the "Individuals" chapter of the Defense Manpower Requirements Report, must be programmed to account for the fact that these personnel are in formal school training and are not available for duty with operational units. All of these personnel must be paid, housed, and supported. The basis for establishing these resource requirements is the "average training load."

The aggregate training load of courses of instruction within a given training category or sub-category is computed in accordance with the following formula, except as noted:

$$\frac{\text{Entrants + Graduates}}{2} \times \text{Course Length}^{1/} = \text{Load}$$

1/ Training time is expressed as a fraction of a year

Training load data is calculated by class and aggregated by course and training category. Fractions of carryover classes conducted during the year are included as though they were separate classes. However, individuals remaining in class at the end of a period are not counted as graduates, nor are individuals already in a class at the beginning of a period counted as entrants except for purposes of computing training loads for these fractions of courses.

The training load for a category or sub-category of training (e.g., Specialized Skill Training or Functional Training within that category) is the sum of the loads computed for all classes of courses within the category or sub-category. This formula is also used at the course level or training category level when detailed estimates by class are not available.

This method of computation implies "straight-line" attrition, that is, net class attrition occurs at a constant rate during a course. More detailed methods to calculate the impact of attrition for computation of load are used when better information is available. This is particularly true for high cost courses such as within flight training programs.

Since attrition varies for different training programs and is not always spread uniformly throughout the length of a course of training, determining training loads becomes a complex problem in estimation. This process of estimation involves two related factors.

First, across the spectrum of training programs that are within the scope of this report, attrition varies from nearly zero to as high as 28 percent. Most officer Professional Development Education programs have practically no attrition. For FY 1998 and 1999, the Services estimate that about 8 percent of new recruits on a DoD wide basis will not complete Recruit Training because they will not have the mental or physical qualifications, or the motivation, for military life. Attrition rates in Specialized Skill Training vary widely, with the longer and more demanding courses tending to have higher losses. Pilot training is near the top of the scale in attrition. The higher rate of losses is based on lack of aptitude or motivation for flying, accidents and similar causes which are intensified in this type of training. While historical data provide a basis for projecting attrition rates for all types of training there is a considerable possibility for error based on variance in such factors as student quality and motivation.

A second necessary step in evaluating the effect of attrition is to estimate the phasing of attrition for each training program. In some courses, attrition tends to be higher in the early stages of a course when those less skilled or lacking motivation are discovered. In other courses, the bulk of attrition may occur toward the end of the course. The patterns of losses vary widely among types of training and over time. The complexities of the attrition variable make it necessary for the Services to use computer simulations in their training load calculations which take into account the rates and time-phasing of attrition.

An additional variation is introduced into the conceptual process of forecasting requirements and planning training loads as described above by the seasonal and cyclical nature of new accessions to the Services. Inputs to many of the more stable training programs -- Professional Development Education, Flight Training, the Service Academies, and the most advanced portions of Specialized Skill Training -- are readily predictable. Inputs to the training programs which are dependent on new accessions (Recruit Training and Initial Skill Training for graduates of Recruit Training) are considerably more volatile. The volume of inputs to these types of training depends on such intangibles as job opportunities in the civilian economy and the decisions of young people to enlist, delay enlisting, or not enlist. Moreover, enlistments are seasonal in nature, following a long-term pattern of "good" and "bad" recruiting months, where phased requirements may move independently of these seasonal patterns. As a result, training loads for the initial active duty training programs are generally based on a compromise involving the timing of predicted enlistments and the capacity of the training base as well as when the new personnel are needed to fill vacancies in the job structure. Most of the courses in these programs are relatively short, and program adjustments can readily be made.

APPENDIX B

SELECTED MAJOR COURSES/SKILL AREAS TRAINED IN OTHER SERVICES

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Army	Construction Equipment Operator	Navy Marine Corps
Army	Airborne, Jumpmaster	Navy Marine Corps Air Force
Army	Artillery	Marine Corps
Army	Armor	Marine Corps
Army	Joint Tactical Communications Systems Systems (TRI-TAC)	Navy Air Force Marine Corps
Army	Stinger/Redeye Missile	Navy Air Force Marine Corps
Army	Satellite Communications Systems	Navy Air Force Marine Corps
Army	Tracked Vehicle Repair	Marine Corps Air Force
Army	Postal Operations	Navy Air Force Marine Corps
Army	Biomedical Equipment Specialist (Basic and Advanced)	Navy Coast Guard
Army	Behavioral Science Specialist	Air Force Marine Corps
Army	Medical Laboratory Specialist (Basic)	Navy Coast Guard
Army	Psychiatric Specialist	Navy
Army	Veterinary Specialist (Basic)	Air Force Marine Corps

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Army	Laser Microwave Hazards	Navy Air Force
Army	Tropical Medicine	Air Force
Army	Respiratory Specialist	Navy
Army	Occupational Therapy Specialist	Air Force
Army	Advanced Digital Theory	Navy
Army	Shiploading & Stowage	Navy Marine Corps
Army	Ocean Transportation & Marine Terminal Management	Navy Marine Corps
Army	Special Operations Forces Basic Medic	Navy
Army	Advanced Special Operations Combat Medic	Navy
Army	Basic Morse Code	Navy Air Force Marine Corps
Army	Morse Interceptor	Navy
Army	UH-60 Helicopter Maintenance	Air Force
Army	Rotary Wing Aircraft Pilot	Air Force
Army	Nuclear Biological Chemical	Air Force Marine Corps
Army	Ranger	Air Force Navy Marine Corps
Army	Physical Therapy	Navy Coast Guard
Army	Orthopedic Specialist	Air Force
Army	Ammunition Specialist	Marine Corps
Army	Food Service Specialist	Marine Corps
Army	Petroleum Supply Specialist	Marine Corps

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Army	Armor Officer Basic & Advanced	Marine Corps
Army	Legal Assistance & Operational Law	Air Force Navy Marine Corps Coast Guard
Army	Hostage Negotiations	Air Force Marine Corps
Army	Military Police Investigation & Military Police Officer	Air Force Navy Marine Corps
Army	Civil Affairs	Air Force Marine Corps
Army	Individual Terrorism Awareness	Navy Marine Corps
Army	Combat Casualty Management	Air Force Marine Corps
Army	Packaging Techniques for HAZMAT	Air Force Navy Marine Corps
Navy	Aviation Maintenance	Marine Corps
Navy	Flight Training	Marine Corps Coast Guard
Navy	Explosive Ordnance Disposal	Army Air Force Marine Corps
Navy	Cryptologic Courses	Army Marine Corps Air Force
Navy	Diving	Army Marine Corps Air Force Coast Guard
Navy	Musician	Army Marine Corps

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Navy	Cryptologic Maintenance	Marine Corps Air Force Coast Guard Army
Navy	Teletype Maintenance	Marine Corps
Navy	Joint and Combined Planning and Operation	Army Marine Corps Air Force Coast Guard
Navy	Military Justice	Marine Corps Coast Guard
Navy	Shipboard Firefighting	Marine Corps Coast Guard
Navy	Corrosion Control	Coast Guard
Navy	Damage Control	Coast Guard
Navy	Supply Support	Marine Corps
Navy	Underwater Construction	Army
Navy	Survive, Evade, Resist, Escape (SERE), Code of Conduct	Marine Corps
Navy	Causeway Barge Ferry Training	Army
Navy	Water Survival Training	Air Force Marine Corps
Navy	Clinical Nuclear Medicine	Air Force Army
Navy	Independent Duty Corpsman	Coast Guard
Navy	Optician	Air Force Army
Navy	X-Ray Technician	Coast Guard
Marine Corps	Applications Programmer	Navy Air Force
Marine Corps	Assembler Language Code Systems Control Programming	Air Force Navy

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Marine Corps	COBOL Programming Computer	Navy
Marine Corps	Computer Operator	Air Force
Marine Corps	Computer Security Specialist	Navy Air Force
Marine Corps	Entry Level Ada Programming	Navy
Marine Corps	Database Management	Air Force Navy
Marine Corps	Multiple Virtual Storage (MVS) Diagnostics	Air Force
Marine Corps	MVS Fundamentals and Logics	Air Force
Marine Corps	MVS Performance and Tuning	Air Force
Marine Corps	Network Control Specialist	Navy Air Force
Marine Corps	Small Computer Systems Specialist	Navy
Marine Corps	Micro-Computer Repair	Army
Air Force	Interservice Space Fundamentals Course	Army Navy
Air Force	Imagery Analysis Apprentice	Army
Air Force	Apprentice Crypto Linguist Spec (Non-Target)	Army Navy
Air Force	Physical Measurement and Calibration Journeyman	Marine Corps Navy
Air Force	Calibration	Navy Marine Corps
Air Force	Comm-Cable & Antenna System Apprentice	Army Marine Corps
Air Force	Comm-Cable System Apprentice	Army Marine Corps
Air Force	Electrical System Apprentice	Army Navy

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Air Force	Utilities System Apprentice	Army Navy
Air Force	Uninterruptible Power Supply	Navy
Air Force	Civil Engineering Advanced Electronics	Navy
Air Force	Traffic Management and Accident Investigation	Army Marine Corps Navy
Air Force	Military Working Dog Training Supervisor	Army Marine Corps Navy
Air Force	Meteorological and Oceanographic Analyst/Forcaster	Marine Corps
Air Force	Aerographers Mate	Navy
Air Force	Marine Corps Weather Observer	Marine Corps
Air Force	Romance Crypto Linquist	Marine Corps Navy
Air Force	Electronic Warfare/Signals Intel Voice Interceptor	Army
Air Force	Slavic Crypto Linguist	Marine Corps Navy
Air Force	Far East Crypto Linguist	Army Navy
Air Force	Mideast Crypto Linguist	Army Navy
Air Force	Lateral Analysis and Reporting	Navy Marine Corps
Air Force	Transcriber/Gister	Army
Air Force	Fundamentals Military Crypto Analysis	Army Marine Corps
Air Force	Consolidated Intermediate Analysis and Reporting	Marine Corps Navy
Air Force	Wolfers/Rocketeer Subsystem Maintenance	Army Navy

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Air Force	Chainwork Maintenance Training Course	Army Navy
Air Force	Fiber Optic Concepts and Local Networking Theory	Navy
Air Force	Defense Sensor Interp & Application Training Program	Army Navy Marine Corps

APPENDIX C

INDIVIDUAL TRAINING WORKLOAD AND TRAINING STAFF [1/] AT MAJOR LOCATIONS BY TRAINING CATEGORY FY 1998

A. Recruit Training

Facility	Workload	Training Staff E/S Military	Civilian
Army [2/]			
Fort Jackson, SC [3/]	8,013	1,147	13
Fort Knox, KY	2,065	315	12
Fort Sill, OK	2,975	420	0
Fort Leonard Wood, MO [3/]	4,009	534	28
Navy			
Great Lakes, IL	8,444	996	7
Marine Corps [2/]			
Parris Island, SC	4,173	1,104	7
San Diego, CA	3,779	1,093	3
Air Force			
Lackland Air Force Base, TX	3,980	403	52

1/ For all tables in Appendix C, Training Staff End Strength (E/S) includes instructors,school/training center staff, and student supervisors. Does not include manpower for training support, training development, management headquarters, and base operating support is not included.

2/ The Army and Marine Corps include ROTC Basic Camp workload in their Recruit Training and workloads.

3/ Army Recruit Training facilities that train female recruits.

B. Officer Acquisition Training

Facility	Workload	Training Staff E/S	
		Military	Civilian
Army			
West Point, NY (USMA)	4,065	540	113
Fort Monmouth, NJ (Prep School)	165	12	18
Ft. Benning, GA (OCS)	117	35	2
Navy			
Annapolis, MD	3,994	265	319
Newport, RI	413	33	30
Pensacola, FL	269	31	6
San Diego, CA (Medical)	20	1	0
Ft. Sam Houston, TX (Medical)	7	6	0
Marine Corps			
OCS, Quantico	284	164	2
Air Force			
Colorado Springs, CO			
Air Force Academy	4,101	1,971	1,891
Air Force Academy Prep School	211	30	10
Maxwell AFB, AL (OTS)	169	42	1

C. Specialized Skill Training

Facility	Workload	Training Staff E/S Military	Training Staff E/S Civilian
Army			
Aberdeen Proving Ground, MD (Ordnance Sch)	2,633	682	201
Fort Benning, GA	2,716	2,037	157
Fort Bliss, TX	1,031	757	114
Fort Eustis, VA	1,899	713	198
Fort Gordon, GA	3,884	909	201
Fort Huachuca, AZ [1/]	2,327	1,052	122
Fort Jackson, SC	2,924	778	99
Fort Knox, KY	1,290	2,106	172
Fort Leavenworth, KS	583	80	3
Fort Lee, VA	4,217	759	246
Fort Leonard Wood, MO	2,549	1,226	165
Fort McClellan, AL [2/]	1,130	0	0
Fort Rucker, AL	184	227	70
Fort Sill, OK	1,707	890	103
DLI-ELC, Monterey, CA	3,388	213	914
DLI-ELC,Lackland AFB TX [3/]	0	25	0
OMMCS Redstone, Arsenal, AL	1,695	558	168
Fort Monroe, VA [4/]	27	0	0
Navy			
Athens, GA	223	52	12
Bangor, WA	460	432	30
Bethesda, MD (Medical)	150	69	3
Camp Lejeune, NC (Medical)	157	43	0
Camp Pendleton, CA (Medical)	123	38	0
Dam Neck, VA	1,398	858	46
Great Lakes, IL	4,671	1,152	59
Great Lakes, IL (Medical)	793	141	9
Groton, CT	1,338	634	5
Groton, CT (Medical)	62	27	3
Gulfport, MS	398	78	18
Houston, TX (Medical)	34	22	1
Indian Head, MD	201	67	1
Ingleside, TX	58	77	1
Jacksonville, FL	308	230	5
Kings Bay, GA	429	320	25
Little Creek, VA	412	143	0
Mayport, FL	116	143	1
Meridian, MS	381	58	10
Newport, RI	827	332	23
Norfolk, VA	1,044	855	58
Orlando, FL	1,973	339	0
Panama City, FL	297	210	4

C. Specialized Skill Training

Facility	Workload	Training Staff E/S Military	Civilian
Navy (continued)			
Pearl Harbor, HI	208	215	8
Pensacola, FL	4,035	1,471	214
Pensacola, FL (Medical)	63	24	3
Port Hueneme, CA	349	98	27
Portsmouth, VA (Medical)	224	86	5
San Diego, CA	1,930	1,660	96
San Diego, CA (Medical)	373	121	11
Schenectady, NY	329	538	0
Whidbey Island, WA	99	157	0
Yorktown, VA (Medical)	38	13	1
Marine Corps			
MCCDC, Quantico, VA	1,046	1,103	25
MCB, Camp Lejune, NC	2,594	1,190	49
MCRD, Paris Island, SC	94	9	0
MCLB, Albany, GA [5/]	205	0	0
MCRD, San Diego, CA	260	65	1
MCAGCC, 29 Palms, CA	1,057	548	73
MCB, Camp Pendleton, CA	1,662	851	6
Air Force			
Goodfellow AFB, TX	2,375	694	111
Keesler AFB, MS	3,914	1,029	453
Lackland AFB, TX	2,796	1,201	269
Sheppard AFB, TX (Tech)	4,782	988	388
Sheppard AFB, TX (Med)	1,571	372	29
Vandenberg AFB, CA	423	344	36

1/ Fort Huachuca includes Army Management Structure Code (AMSCO) 321731, 321733 and 321734.
2/ Manpower carried under Fort Leonard Wood, MO
3/ Instructors provided by USAF
4/ Miscellaneous staff training including School of Cadet Command, DCST staff training and training conducted at Vandenburg AFB, CA
5/ MCLB closed at Albany, GA – staff transferred to Camp Lejune, NC

D. Flight Training

Facility	Workload	Training Staff E/S Military	Training Staff E/S Civilian
Army			
Fort Rucker, AL			
Undergraduate	617	458	140
Advance/Graduate	452	467	77
Navy			
Corpus Christi, TX	343	179	113
Kingsville, TX	163	133	23
Meridian, MS	168	165	22
Pensacola, FL	999	356	65
Whiting Field, FL	731	296	45
Marine Corps			
Corpus Christi, TX 2/	0	90	0
Pensacola, FL 2/	0	634	6
Air Force (a)			
Columbus AFB, MS	137	550	34
Vance AFB, OK	262	449	40
Laughlin AFB, TX	270	529	55
Sheppard AFB, TX	212	305	34
Randolph AFB, TX 1/	213	747	66

1/ Includes workload and training staff for Hondo and USAFA Flight Screening Courses. Includes Air Force interservice flight training staff assets at Ft. Rucker, Corpus Christi, Corry Station Pensacola, and Whiting Field.

2/ Workload included in Navy Flight Training

E. Professional Development Education

Facility	Workload	Training Staff E/S Military	Civilian
Army			
Fort Bliss, TX	785	154	19
Fort Leavenworth, KS	949	147	71
Fort Lee, VA	8	0	0
Navy			
Monterey,CA	1,368	61	359
Newport, RI	480	130	55
Norfolk, VA	243	77	23
Marine Corps			
MCCDC, Quantico	570	297	72
MCB, Camp Lejuene, NC (SNCO)	288	46	0
MCAS, El Toro CA (NCO)	240	46	0
MCB, Camp Butler JA	112	34	0
MCAS, Kaneohe Bay	19	15	0
MCAGCC, 29 Palms, CA (NCO)	90	19	0
Air Force [1/]			
Noncommissioned Officer Academies			
RAF Upward, UK	111	16	
Tyndall AFB, FL	52	18	
McGuire AFB, NJ	47	18	
Peterson AFB, CO	37	17	
Keesler AFB, MS	58	20	
Lackland AFB, TX	58	20	
Goodfellow AFB, TX	32	12	
Kirtland AFB, NM	38	14	
Robbins AFB, GA	24	11	
Kadena Air Base, Japan	41	13	
Hickam AFB, HI	23	7	
Elmendorf AFB, AK	18	9	
Kisling Kapaun Air Base, GE	69	18	
ANG McGhee Tyson, TN	84	24	
Ramstein AFB, GE	97	23	
Airman Leadership School			
Barksdale AFB, LA	19	6	
Beal AFB, CA	13	4	
Cannon AFB, NM	13	4	
Davis-Monthan AFB, AZ	13	4	
Dyess AFB, TX	19	6	
Ellsworth AFB, SD	13	4	

E. Professional Development Education (continued)

Facility	Workload	Training Staff E/S	
		Military	Civilian
Air Force [1/]			
Airman Leadership School			
F. E. Warren AFB, WY	9	3	
Fairchild AFB, WA	14	6	
Grand Forks AFB, ND	12	6	
Holloman AFB, NM	13	4	
Langley AFB, VA	19	6	
Luke AFB, AZ	22	6	
MacDill AFB, FL	9	4	
McConnel AFB, KS	5	6	
Minot AFB, ND	19	6	
Moody AFB, GA	13	4	
Mountain Home AFB, ID	13	4	
Nellis AFB, NV	19	6	
Offutt AFB, NE	25	7	
Pope AFB, NC	13	4	
Seymour Johnson AFB, NC	13	4	
Shaw AFB, FL	19	4	
Tyndall AFB, FL	19	4	
Whiteman AFB, MO	13	4	
Altus AFB, OK	6	4	
Andrews AFB, MD	7	6	
Charleston AFB, SC	13	6	
Dover AFB, DE	11	6	
Hurlburt Field, FL	8	7	
Kirtland AFB, NM	7	4	
Little Rock AFB, AR	21	6	
Malmstrom AFB, MT	11	3	
McGuire AFB, NJ	11	7	
Scott AFB, IL	10	3	
Travis AFB, CA	21	8	
Goodfellow AFB, TX	5	3	
Keesler AFB, MS	21	4	
Lackland AFB, TX	24	6	
Randolph AFB, TX	10	4	

E. Professional Development Education (continued)

Facility	Workload	Training Staff E/S Military	Civilian
Air Force [1/]			
Airman Leadership School			
Sheppard AFB, TX	10	3	
Edwards AFB, CA	31	4	
Eglin AFB, FL	66	6	
Hanscom AFB, MA	8	3	
Hill AFB, UT	30	5	
Kelly AFB, TX	42	5	
McChord AFB, WA	14	6	
McClellan AFB, CA	17	3	
Robins AFB, GA	32	4	
Tinker/Vance AFB, OK	68	6	
Wright-Patterson AFB, OH	31	4	
Patrick AFB, FL	5	3	
Peterson AFB, CO	12	4	
Vandenberg AFB, CA	7	4	
Bolling AFB, DC	7	4	
Fort Meade, MD	8	3	
Maxwell AFB, AL	13	5	
USAF Academy, CO	5	3	
Aviano Air Base, IT	17	7	
Incirlik AFB, TU	8	3	
RAF Lakenheath, UK	27	7	
Ramstein Air Base, GE	27	6	
Howard, Panama Canal	13	4	
Eielson AFB, AL	10	4	
Spangdalhem Air Base, GE	20	6	
Anderson Air Base, GU	11	3	
Elmendorf AFB, AK	15	5	
Kadena AFB, JA	27	6	
Misawa AFB, JA	11	5	
Hickam AFB, HI	19	7	
Yokota Air Base, JA	14	4	
Other Professional Development Education			
Gunter Annex, AL	363	53	2
Maxwell AFB, AL	1,232	356	113

1/ Air Force - the current manpower standard does not authorize civilians at the NCO Academies or the Airman Leadership Schools.

F. One Station Unit Training (OSUT)

Facility	Workload	Training Staff E/S	
		Military	Civilian
Army			
Fort Benning, GA	5,006	1,053	30
Fort Knox, KY	1,973	1,041	74
Fort McClellan, AL [1/ 2/]	2,612	702	21
Fort Sill, OK	1,366	475	24
Fort Leonard Wood, MO [2/]	1,284	252	10

1/ Fort McClellan includes both MP and Chemical schools

2/ Facilities open to female soldiers.